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          (c) 2004 The HW Wilson Co.
File   95:TEME-Technology & Management 1989-2004/May W4
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? ds

Set	Items	Description
S1	1460695	CONTROLL?
S2	70128	RH OR RHM OR (REQ? ? OR REQUEST?)(2N)(HANDL?)
S3	452305	DATABASE?
S4	3937	S3(2N)(ID? ? OR IDENTIF?)
S5	53	(GENERAT? OR CREAT? OR PRODUC?)(2N)S4
S6	1695908	NETWORK?
S7	2538	S1 AND S2
S8	95695	S1 AND S6
S9	64	S8 AND S2
S10	0	S9 AND S4
S11	11	S8 AND S4
S12	586615	NETWORK?/TI
S13	54656	S3(2N)MANAG?
S14	1678	S12 AND S13
S15	4411338	CONTROL? ?
S16	67	S14 AND S1
S17	394	S14 AND S15
S18	6	S16 AND HANDL?
S19	27	S17 AND HANDL?
S20	0	(S18 OR S19) AND S2
S21	2	S17 AND S2
S22	62126	S3 AND S6
S23	8441	S22 AND S13
S24	10	S23 AND S2
S25	35	S23 AND S4
S26	45	S24 OR S25
S27	108579	SERVER?
S28	4	(S25 OR S26) AND S27
S29	436	S3(2N)INSTANC?
S30	43538	S27(3N)CLIENT?

```
S31       13     S30 AND S4
S32      817     S3(2N)LOAD?
S33     1148     S3(3N)LOAD?
S34       69     S27 AND S33
S35       25     S22 AND S34
S36       25     S35 AND (S1 OR S2 OR S6)
S37        3     S36 AND S13
S38      933     REQUEST?(3N)HANDL?
S39    31501     (ASSIGN? OR MAP? OR RE(W)ASSIGN? OR RE(W)MAP?) AND S3
S40     3089     S39 AND S13
S41       82     S40 AND S30
S42        0     S41 AND S33
S43        4     S41 AND LOAD?
S44       82     S41 AND S30
S45        1     S44 AND S2
S46        0     S44 AND S4
S47       14     S21 OR S28 OR S37 OR S43 OR S45
S48        7     S44 AND HANDL?
S49       20     S47 OR S48
S50       26     S49 OR S18
S51   122742     S3/TI
S52   706566     S51 OR S12
S53      285     S52 AND S2
S54        0     S4 AND S53
S55       16     S53 AND (ID? ?  OR IDENTIF?)
S56        0     S55 AND S39
S57    31501     S3(3N)S39
S58      245     S57(3N)S27
S59       89     S58 AND S52
S60        6     S59 AND S1
S61        0     S59 AND S2
S62        7     S59 AND HANDL?
S63       18     S59 AND S13
S64        0     S63 AND INSTANC?
S65       13     S60 OR S62
S66      246     S27(2N)(CHOOS? OR CHOICE?)
S67        0     S63 AND S66
S68        1     S58 AND S66
S69       38     S50 OR S60 OR S62 OR S68
S70       65     S24 OR S31 OR S47 OR S55 OR S63
S71       49     S70 NOT S69
S72       34     RD S69 (unique items)
```

? t s34/7,de/1-34

 34/7,DE/1   (Item 1 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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06765618
   E.I. No: EIP04128071097
   Title: 2003 International Conference on Machine Learning and Cybernetics:
Volume 1
   Author: Anon (Ed.)
   Conference Title: 2003 International Conference on Machine Learning and
Cybernetics
   Conference Location: Xi'an, China   Conference Date: 20031102-20031105

Sponsor: IEEE   SMCTC; Hebei Univeristy; Northwestern Polytechnical
University
    E.I. Conference No.: 62422
    Source: International Conference on Machine Learning and Cybernetics v 1
2003. (IEEE cat n 03EX693)
    Publication Year: 2003
    ISBN: 0780378652
    Language: English
    Document Type: CP; (Conference Review)   Treatment: T; (Theoretical)
    Journal Announcement: 0403W4
    Abstract: The proceedings contains 127 papers from the 2003 International
Conference on Machine Learning and Cybernetics: Volume 1. The topics
discussed include: generation of frequent Fuzzy states evolution rules;
dynamic load balancing algorithms for sequence mining;   studies on Chinese
web page classification; a simple and efficient classifying algorithm;
sentences clustering based automatic summarization; a fast algorithm for
building concept lattice and the study of association algorithm BGL based
on binary system and oriented graph. (Edited abstract)
    Descriptors: Data mining; Time series analysis; Parallel processing
systems; Data reduction; **Database** systems; Dynamic **loads**; World
Wide Web; Online searching; Theorem proving; Set theory; **Servers**;
Electronic mail; Problem solving

 34/7,DE/2   (Item 2 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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06030058
    E.I. No: EIP02146904877
     Title: User query interface for the deep-foundations **load**-test
database
    Author: Satyanarayana, Raghavendra; Ealy, Carl D.; Dimillio, Albert F.;
Kalavar, Shesh R.
    Corporate Source: Eng. and Software Consultants, Inc., Fairfax, VA 22030,
United States
    Source: Transportation Research Record n 1755 2001. p 3-14 01-3324
    Publication Year: 2001
    CODEN: TRREDM   ISSN: 0361-1981
    Language: English
    Document Type: JA; (Journal Article)   Treatment: A; (Applications); T;
(Theoretical)
    Journal Announcement: 0204W1
    Abstract: The deep-foundation **load**-test **database** is a result
of research quality data collection over the past 15 years. The database
consists of soils data along with the deep-foundations load-test data
gathered from prototype tests conducted all over the world. The soils data
include general site information, stratigraphy, laboratory, and in situ
test details. The foundations data consist of general foundations
information including foundation construction, and load-settlement
information to failure. Over 1,000 foundations are currently in the
database, and more are being added. The database is checked for its
validity and correctness both before and after the data are added to the
database to make sure that the data integrity is preserved. Also, the data
are periodically backed up and the data input is strictly administered by
providing controlled access to the designated individuals. The database is
structured to follow the rules of relational database management system
(RDBMS). The database resides in a Unix-based Sun Solaris **server**,

and the database engine is Sybase RDBMS. The database front-end query application is under development for the Internet using Java as the programming language and will run under any Internet-capable browser (e.g., Netscape, Microsoft Internet Explorer) environment. The application will use Java applets to communicate with the database **server**. The user community includes state highway engineers, geotechnical researchers, students, and practicing engineers. Interested users can access the database using the interface to view, download, and chart the data at run-time. 1 Refs.

   Descriptors: *Load testing; Soil mechanics; Pile foundations; Relational database systems; User interfaces; Query languages; Soil testing; Stratigraphy; Road construction; Settlement of structures; Failure (mechanical); Data acquisition; Java programming language

   34/7,DE/3   (Item 3 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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05988633
   E.I. No: EIP02036826709
   Title: WebFrame: A Web application **server** framework
   Author: Qin, F.; Zhang, B.; Li, J.
   Corporate Source: Lab. of Comp. Sci. Inst. of Software Chinese Acad. of Sci., Beijing 100080, China
   Source: Ruan Jian Xue Bao/Journal of Software v 12 n SUPPL. June 2001. p 152-155
   Publication Year: 2001
   CODEN: RUXUEW   ISSN: 1000-9825
   Language: Chinese
   Document Type: JA; (Journal Article)   Treatment: A; (Applications); T; (Theoretical)
   Journal Announcement: 0201W3
   Abstract: As a Web application **server** framework, WebFrame is designed to improve the availability and security for Web distributed applications, and to solve related problems such as scalability, load balancing, re-connection to database, security and performance etc. We introduce WebFrame architecture and its technological features. (Edited abstract) 7 Refs.
   Descriptors: World Wide Web; Client **server** computer systems; **Servers**; Distributed database systems; Security of data; Performance; Computer architecture

   34/7,DE/4   (Item 4 from file: 8)
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05921311
   E.I. No: EIP01385473039   ‒
   Title: Evolutionary algorithm performance profiles   on the adaptive distributed database management problem
   Author: Oates, M.J.
   Source: BT Technology Journal v 18 n 4 2000. p 66-77
   Publication Year: 2000
   CODEN: BTTJEY   ISSN: 0265-0193
   Language: English
   Document Type: JA; (Journal Article)   Treatment: T; (Theoretical); X;

(Experimental)
   Journal Announcement: 0110W4
   Abstract: Evolutionary algorithms have been shown to be effective in
providing configuration optimisation to dynamic **load** balancing in
distributed **database** systems and Web **servers**. This paper
explores the tuning parameter performance profile of such techniques over
a variety of problems, including the adaptive distributed database
management problem (ADDMP), focusing on a range of interesting and
important features. The ability of the evolutionary search process to
reliably find good solutions to a dynamic problem in a minimal and
consistent run-time is of paramount importance when considering their
application to real-time industrial control problems. This paper
demonstrates the existence of certain optimal parameter values,
particularly for the rate of applied mutation, which are shown to produce
consistently good problem solutions in a low number of evaluations with a
minimum standard deviation. (Author abstract) 27 Refs.
   Descriptors: *Genetic algorithms; Distributed database systems;
Information management; World Wide Web; Performance; Industrial
applications; Control

 34/7,DE/5   (Item 5 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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05675209
   E.I. No: EIP00105365504
   Title: Selecting and implementing an embedded database system
   Author: Olson, Michael A.
   Corporate Source: Sleepycat Software
   Source: Computer v 33 n 9 Sep 2000. p 27-34
   Publication Year: 2000
   CODEN: CPTRB4   ISSN: 0018-9162
   Language: English
   Document Type: JA; (Journal Article)   Treatment: G; (General Review)
   Journal Announcement: 0011W4
   Abstract: Today, the computing landscape is much richer and more diverse
than it was even a decade ago. Developers can choose from a wide variety of
hardware, operating systems, and tools for the embedded systems they build.
This article explains that despite the differences of these platforms and
tools, embedded systems share important characteristics with the desktop
and **server** systems they supplant.
   Descriptors: Embedded systems; Database systems; Personal computers;
Client **server** computer systems; Computer software selection and
evaluation; Object oriented programming; Response time (computer systems);
Online searching; Data transfer; Performance

 34/7,DE/6   (Item 6 from file: 8)
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05392980
   E.I. No: E2099104835280
   Title: Site selection for real-time client request handling
   Author: Kanitkar, Vinay; Delis, Alex
   Corporate Source: Polytechnic Univ, Brooklyn, NY, USA
   Conference Title: Proceedings of the 1999 19th IEEE International

Conference on Distributed Computing Systems (ICDCS'99)
   Conference Location: Austin, TX, USA   Conference Date: 19990531-19990604
   Sponsor: IEEE Computer Society
   E.I. Conference No.: 55373
   Source: Proceedings - International Conference on Distributed Computing
Systems 1999. p 298-305
   Publication Year: 1999
   CODEN: PICSEJ   ISBN: 0-7695-0222-9
   Language: English
   Document Type: JA; (Journal Article)   Treatment: G; (General Review)
   Journal Announcement: 9911W4

   Abstract: In a conventional client-**server** database system (CS-DBS),
a transaction and its requisite data have to be colocated at a single site
for the operation to proceed. This has traditionally been achieved by
moving either the data or the transaction. Today, the availability of
powerful workstations and high-bandwidth networking options has led users
to expect real-time guarantees about the completion times of their tasks.
So as to offer such guarantees in a CS-DBS, a transaction should be
processed by any means that allows it to meet its deadline. In this paper,
we explore the option of moving both transactions and data to the most
promising sites for successful completion. We propose a load-sharing
mechanism that oversees the shipment of data and transactions in order to
increase the efficiency of a client-**server** cluster. Additionally, we
make use of the concept of grouped locks to schedule the movement of data
objects in the cluster in a more efficient manner. An experimental
evaluation shows that the use of our load-sharing algorithm provides a
considerable improvement in the real-time processing efficiency of a CS-DBS
even in the presence of very high volumes of update transactions. (Author
abstract) 26 Refs.
   Descriptors: Data transfer; Database systems; Client **server**
computer systems; Storage allocation (computer); Algorithms; Information
retrieval systems; Network protocols

 34/7,DE/7   (Item 7 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)

05281064
   E.I. No: EIP99054670099
   Title: Private information retrieval
   Author: Chor, Benny; Goldreich, Oded; Kushilevitz, Eyal; Sudan, Madhu
   Corporate Source: Technion, Haifa, Isr
   Source: Journal of the ACM v 45 n 6 Nov 1998. p 965-982
   Publication Year: 1998
   CODEN: JOACF6   ISSN: 0004-5411
   Language: English
   Document Type: JA; (Journal Article)   Treatment: T; (Theoretical)
   Journal Announcement: 9907W1
   Abstract: Publicly accessible databases are an indispensable resource for
retrieving up-to-date information. But they also pose a significant risk to
the privacy of the user, since a curious database operator can follow the
user's queries and infer what the user is after. Indeed, in cases where the
users' intentions are to be kept secret, users are often cautious about
accessing the database. It can be shown that when accessing a single
database, to completely guarantee the privacy of the user, the whole
database should be down-**loaded**; namely n bits should he
communicated (where n is the number of bits in the database). In this work,

we investigate whether by replicating the database, more efficient
solutions to the private retrieval problem can be obtained. We describe
schemes that enable a user to access k replicated copies of a database (k
greater than equivalent to 2) and privately retrieve information stored in
the database. This means that each individual **server** (holding a
replicated copy of the database) gets no information on the identity of the
item retrieved by the user. Our schemes use the replication to gain
substantial saving. In particular, we present a two-**server** scheme
with communication complexity $O(n^{**1**/**3})$. (Author abstract) 27 Refs.
   Descriptors: Information retrieval systems; Distributed database systems;
Query languages; Security of data; Data acquisition; Client **server**
computer systems; Computer systems programming; Computational complexity

   34/7,DE/8   (Item 8 from file: 8)
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04905701
   E.I. No: EIP98013999058
   Title: Client-**server** performance on flow-controlled ATM networks: A
web database of simulation results
   Author: Kung, H.T.; Wang, S.Y.
   Corporate Source: Harvard Univ, Cambridge, MA, USA
   Conference Title: Proceedings of the 1997 16th IEEE Annual Conference on
Computer Communications, INFOCOM. Part 3 (of 3)
   Conference Location: Kobe, Jpn   Conference Date: 19970407-19970412
   Sponsor: IEEE
   E.I. Conference No.: 47574
   Source: Proceedings - IEEE INFOCOM v 3 1997. IEEE, Piscataway, NJ,
USA,97CB36034. p 1218-1226
   Publication Year: 1997
   CODEN: PINFEZ   ISSN: 0743-166X
   Language: English
   Document Type: CA; (Conference Article)   Treatment: T; (Theoretical)
   Journal Announcement: 9803W1
   Abstract: Extensive simulation has demonstrated the effectiveness of
credit-based ATM flow control in supporting client-**server**
applications. In particular, request/response protocols used in these
applications allow efficient sharing of switch buffer, for the case when
all the VCs sharing the same buffer are subject to the same degree of
downstream congestion. The required buffer size can be as small as the
minimum of bandwidth*RTT for the link and #Clients*Reply Size.
Request/response protocols generally tolerate congestion better than greedy
loads. Being able to avoid synchronization, FIFO scheduling is sometimes
more efficient than VC round-robin scheduling. These findings are derived
from an online Web database of simulation results covering more than 10,000
network and **load** configurations. The Web **database** approach has
proven to be effective in managing and navigating a large set of simulation
results. (Author abstract) 15 Refs.
   Descriptors: *Asynchronous transfer mode; Network protocols; Wide area
networks; Distributed database systems; Bandwidth; Congestion control
(communication); Telecommunication links; Computer simulation;
Synchronization

   34/7,DE/9   (Item 9 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)

04894787
  E.I. No: EIP97123967117
  Title: Dynamic dividends
  Author: Bruno, Lee
  Source: Data Communications v 26 n 15 Nov 1997. p 101-104, 106, 108
  Publication Year: 1997
  CODEN: DACODM   ISSN: 0363-6399
  Language: English
  Document Type: JA; (Journal Article)   Treatment: G; (General Review)
  Journal Announcement: 9802W3
  Abstract: Web application **servers** lift the processing **load**
off **databases**. They also speed access to updated information while
easing the use of the Web. It is identified that the reasons for are that
there is no need to write new HTML pages, no need for common gate interface
scripts, and no need for an SQL programmer.
  Descriptors: *Computer networks; Database systems; Data processing;
Information technology; User interfaces; Computer programming

 34/7,DE/10   (Item 10 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)

04554137
  E.I. No: EIP96110409352
  Title: 24 hours load forecasting for the energy management system on
Crete - online training and forecasting of load data
  Author: Bitzer, B.; Roesser, F.; Papazoglou, T.M.
  Corporate Source: Univ of Paderborn, Paderborn, Ger
  Conference Title: Proceedings of the 1996 31st Universities Power
Engineering Conference. Part 1 (of 3)
  Conference Location: Iraklio, Greece   Conference Date: 19960918-19960920
  E.I. Conference No.: 45592
  Source: Proceedings of the Universities Power Engineering Conference v 1
1996. Technological Educational Institute, Iraklio, Greece. p 346-349
  Publication Year: 1996
  CODEN: 002221
  Language: English
  Document Type: CA; (Conference Article)   Treatment: G; (General Review);
T; (Theoretical)
  Journal Announcement: 9701W1
  Abstract: This paper presents the results of an European co-operation
project between the University of Paderborn and the Technological
Educational Institute in Iraklion on Crete. Based on neural networks the
experiences and results of a 24-hour-online-forecasting system are
discussed. The main advantage of this system is the online capability. The
system is able to get the load data directly from the data **server** as
measurement points or as data base sheets. By training the networks
automatically with the load data of the previous days and weeks, the
networks are able to adapt better to the seasonal effects of the load and
the increasing of the load during the years. The prediction of the loads
are given in data sheets and the forecasted and actual load profiles can be
visualized. The forecast errors between the prediction and the real data
are shown online. (Author abstract) 14 Refs.
  Descriptors: Electric power systems; Neural networks; Management
information systems; Electric load forecasting; Online systems; Electric

loads; Database systems; Information use

 34/7,DE/11   (Item 11 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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04499620
  E.I. No: EIP96093335499
  Title: Using case-based techniques to enhance constraint satisfaction
problem solving
  Author: Huang, Ye; Miles, Roger
  Corporate Source: Univ of the West of England, Bristol, Engl
  Source: Applied Artificial Intelligence v 10 n 4 Jul-Aug 1996. p 307-328
  Publication Year: 1996
  CODEN: AAINEH   ISSN: 0883-9514
  Language: English
  Document Type: JA; (Journal Article)   Treatment: A; (Applications); T;
(Theoretical)
  Journal Announcement: 9611W2
  Abstract: This article reports on investigations using case-based
reasoning to deal with large constraint satisfaction problems associated
with the assembly of holiday packages. The system aims to reduce the amount
of consistency checking in terms of database queries. The holiday
reservation problem is characterized by exhibiting large cardinality in the
constraint tables. In order to reduce the **load** on the **database
server,** issues concerning the similarity measurement, the quality of
the examplars in the case base, and the conflict ordering problem are
addressed. Methods of improving system performance by using case-based
techniques have been presented. Empirical results are reported to
demonstrate the effectiveness of these methods. Ways of forming a hybrid
system using the case-based techniques and a constructive approach to
achieve a better overall performance are also outlined. (Author abstract)
15 Refs.
  Descriptors: *Database systems; Constraint theory; Problem solving;
Hybrid computers; Large scale systems; Measurements; Set theory;
Performance

 34/7,DE/12   (Item 12 from file: 8)
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04453938
  E.I. No: EIP95042659595
  Title: Embedding image query operations in an object-relational database
management system
  Author: Ubell, Michael; Olson, Michael
  Corporate Source: Illustra Information Technologies Inc., Oakland, CA,
USA
  Conference Title: Storage and Retrieval for Image and Video Databases III
  Conference Location: San Jose, CA, USA
  Sponsor: SPIE - Int Soc for Opt Engineering, Bellingham, WA USA
  E.I. Conference No.: 22192
  Source: Proceedings of SPIE - The International Society for Optical
Engineering   v   2420   1995. Society of Photo-Optical Instrumentation
Engineers, Bellingham, WA, USA. p 197-203
  Publication Year: 1995

CODEN: PSISDG   ISSN: 0277-786X   ISBN: 0-8194-1767-X
Language: English
Document Type: CA; (Conference Article)   Treatment: X; (Experimental); M
; (Management Aspects)
Journal Announcement: 9609W3

Abstract: Modern computer applications use enormous volumes of rich data
like video, still images, and text, as well as more conventional numeric
and character data. Managing huge volumes of such diverse data requires a
database. Content queries, such as 'find me the color images with red
components higher than this threshold,' require that the database system be
able to apply the qualification directly. Relational database systems that
store images as untyped binary large objects (BLOBS) cannot apply
qualifications like this, because the database system does not understand
the contents of the BLOB. Object-Relational Database Management Systems
(ORDBMS), on the other hand, allow users to extend the set of types and
functions known to the database system. Programmers can write code that is
dynamically **loaded** into the **database server,** and that
operates on complex data types such as images. Those functions can be used
in standard SQL queries, and the database manager can use new types and
function results in indices to support fast queries on complex data. In
addition, the query optimizer can be told how expensive the new functions
are, so that it chooses an optimal strategy for satisfying complicated
queries with many different predicates in their qualifications. 0 Refs.
Descriptors: *Relational database systems; Management; Query languages;
Image processing; Optimization

34/7,DE/13   (Item 13 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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04186669
E.I. No: EIP95062743084
Title: Combining case based and constraint based techniques in travel
reservation systems
Author: Huang, Y.; Miles, R.
Corporate Source: Univ of the West of England, Bristol, Engl
Conference Title: Proceedings of the 11th Conference on Artificial
Intelligence for Applications
Conference Location: Los Angeles, CA, USA Conference Date:
19950220-19950223
Sponsor: IEEE
E.I. Conference No.: 43084
Source: Proceedings of the Conference on Artificial Intelligence
Applications 1995. IEEE, Piscataway, NJ, USA,95CH35758. p 46-54
Publication Year: 1995
CODEN: PCAAEF
Language: English
Document Type: CA; (Conference Article)   Treatment: A; (Applications)
Journal Announcement: 9508W2

Abstract: This paper describes a system which uses case based reasoning
to deal with large constraint satisfaction problems associated with the
assembly of holiday packages. The system aims to reduce the amount of
consistency checking in terms of database queries. The holiday reservation
problem is characterised by exhibiting large cardinality in the constraint
tables. In order to reduce the **load** on the **database
server,** issues concerning the similarity measurement, the quality of
the exemplars in the case base and the conflict ordering problem are

addressed. By using the case based approach with the strategies suggested in this paper, improved performance can be achieved. (Author abstract) 14 Refs.

Descriptors: *Reservation systems; Knowledge based systems; Constraint theory; Query languages; Performance; Database systems; Systems analysis; Measurements

34/7,DE/14   (Item 14 from file: 8)
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03916137
    E.I. No: EIP94081364226
    Title: Decision support at lands' end - an evolution
    Author: Bustamente, G.G.; Sorenson, K.
    Source: IBM Systems Journal v 33 n 2 1994. p 228-238
    Publication Year: 1994
    CODEN: IBMSA7   ISSN: 0018-8670
    Language: English
    Document Type: JA; (Journal Article)   Treatment: A; (Applications); G;
(General Review)
    Journal Announcement: 9409W5
    Abstract: A decision support system with over one billion rows of data has been developed at Lands' End using the IBM DATABASE 2**T**M (DB2**(**R**)) relational database management system. This corporate database is a subset of an information Warehouse**T**M framework and functions as both a decision support system **server** and an application enabler. The corporate database uses operational data gathered from order processing and customer mailing systems. Weekly processes reformat these real-time data for **loading** into the corporate **database**. This paper discusses some of the business requirements that guided the development of the corporate database, and also describes the database design process, tool selection, and implementation experiences. (Author abstract) 7 Refs.
    Descriptors: *Decision support systems; Relational database systems; Administrative data processing; Modernization; Real time systems; Systems analysis; Magnetic tape storage

34/7,DE/15   (Item 15 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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03036948
    E.I. Monthly No: EIM9103-010864
    Title: Initial experience with a radiology imaging network to new born and intensive care units.
    Author: Witt, Robert M.; Cohen, Mervyn D.; Appledorn, C. Robert
    Corporate Source: Indiana Univ Medical Cent, Indianapolis, IN, USA
    Conference Title: Medical Imaging IV: PACS System Design and Evaluation
    Conference Location: Newport Beach, CA, USA   Conference Date: 19900206
    Sponsor: SPIE; American Assoc of Physicists in Medicine; American Coll of Radiology; FDA, Cent for Devices & Radiological Health; Natl Electrical Manufacturers Assoc, Diagnostic Imaging & Therapy Systems
    E.I. Conference No.: 13852
    Source: Proceedings of SPIE - The International Society for Optical Engineering v 1234 pt 1. Publ by Int Soc for Optical Engineering,

Bellingham, WA, USA. p 82-85
  Publication Year: 1990
  CODEN: PSISDG   ISSN: 0277-786X   ISBN: 0-8194-0278-8
  Language: English
  Document Type: PA; (Conference Paper)   Treatment: A; (Applications); G;
(General Review); X; (Experimental)
  Journal Announcement: 9103

  Abstract: A digital image network has been installed in the James
Whitcomb Riley Hospital for Children on the Indiana University Medical
Center to create a limited all digital imaging system. The total system is
composed of commercial components, Philips/AT&T CommView system, and
connects an existing Philips Computed Radiology (PCR) system to viewing
workstations located in the intensive care unit and the new born nursery.
The purpose and design of the system is to input the portable chest images
from the PCR system, and to display these images at the remote workstations
on high resolution monitors for direct viewing by referring clinicians,
thus eliminating some of their visits to the radiology department three
floors away. The design criteria includes the ability to centrol all image
management functions on the remote workstations to relieve the clinicians
from any image management tasks except for recalling patient images. The
principal components of the system are the Philips PCR system, the
acquisition module (AM), and the PCR interface to the data management
module (DMM). Connected to the DMM are a display workstation (DW), a
optical disk drive, and a fiber optic to ethernet gateway. The ethernet
link is the network connection to the two results viewing stations (RVS)
located approximately 100 meters from the DMM. The DMM acts as an image
file **server** and image archive device. The DMM manages the image
database and can **load** images to both the DW's and the two
RVS's. The system has met the initial design specifications and can
successfully capture images from the PCR and direct them to the RVS's.
Additional studies are beginning to determine the optimal image management
procedures such as when to archive and purge images from the DMM. (Author
abstract)
  Descriptors: *RADIOGRAPHY--*Diagnostic Applications; BIOMEDICAL
ENGINEERING--Pediatrics; COMPUTER WORKSTATIONS; HOSPITALS--Intensive Care
Units; DATABASE SYSTEMS--Medical Applications; IMAGING TECHNIQUES--Medical
Applications

 34/7,DE/16   (Item 1 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online
(c) 2004 ProQuest Info&Learning. All rts. reserv.

01831909 AADAAI3012515
Safety-checking of machine code
  Author: Xu, Zhichen
  Degree: Ph.D.
  Year: 2001
  Corporate Source/Institution: The University of Wisconsin - Madison (
          0262)
  Supervisors: Barton Miller; Thomas Reps
  Source: VOLUME 62/04-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
          PAGE 1947. 148 PAGES
  Descriptors: COMPUTER SCIENCE
  ISBN: 0-493-23053-X

    Importing and executing untrusted foreign code has become an everyday
occurrence: Web **servers** download plug-ins and applets;

databases load type-specific extensions; and operating systems
load customized policies and performance measurement code. Certification of
the safety of the untrusted code is crucial in these domains.

I have developed new methods to determine statically whether it is
safe for untrusted machine code to be loaded into a trusted host system. My
safety-checking technique operates directly on the untrusted machine-code
program, requiring only that the initial inputs to the untrusted program be
annotated with typestate information and linear constraints. This approach
opens up the possibility of being able to certify code produced by any
compiler from any source language. It eliminates the dependence of safety
on the correctness of the compiler because the final product of the
compiler is checked. It leads to the decoupling of the safety policy from
the language in which the untrusted code is written, and consequently,
makes it possible for safety checking to be performed with respect to an
extensible set of safety properties that are specified on the host side.

I have implemented a prototype safety checker for SPARC
machine-language programs, and applied the safety checker to examples
(ranging from code that contains just a few branches, to code that contains
nested loops, and to code that contains function and method calls). The
safety checker was able to mechanically synthesize the loop invariants and
check these examples in times ranging from less than a second to dozens of
seconds.

 34/7,DE/17   (Item 2 from file: 35)
DIALOG(R)File   35:Dissertation Abs Online
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01423703 AADAAI9522095
DATABASE SUPPORT FOR ELECTRONIC CAD APPLICATION: PERFORMANCE AND
ARCHITECTURE (CLIENT **SERVER**)
   Author: CHU, SHEAUYIN IRIS
   Degree: PH.D.
   Year: 1995
   Corporate Source/Institution: UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
(0090)
   Adviser: MARIANNE WINSLETT
   Source: VOLUME 56/03-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
            PAGE 1532. 105 PAGES
   Descriptors: COMPUTER SCIENCE

     This research addresses the problems in obtaining efficient database
support with good functionality for electronic CAD applications. We believe
that performance is a deciding factor in the acceptance of DBMSes as a
replacement of file systems or home-grown databases in ECAD tools and that
many DBMS design and implementation choices can have a major impact on the
performance of the resulting system.
     Fast loads, fast stores, and fast in-memory references are all
important performance considerations. The first part of this thesis
assessed empirically the impact of different architectural features on the
performance of database systems by running benchmarking experiments on CAD
tools using various DBMSes as the underlying storage system. In these
experiments, the DBMS was used to retrieve and store data only,
representing a loosely-integration between the DBMS and the CAD tool.
Results of these experiments indicate that architectural choices such as
access methods, clustering, transfer granularity, process architecture,
application overhead all have great impact on **database** performance
for **load** and store operations. In addition, the tightly-coupled OO1

benchmark was ported to several commercial DBMSes to investigate tightly-coupled interactions between the DBMS and the CAD tools. The kind of client-**server** architecture was found to have the most significant impact.

A detailed study of different client-**server** architecture choices shows that a 'page-to-page' architecture will permit an implementation where most routine reference following (i.e., where the referenced data is in memory and appropriately locked) is handled by virtual memory hardware to eliminate expensive software overhead. Page-to-page systems, however, have a number of limitations such as unacceptable low concurrency for high-contention data pages and difficulties in supporting fine-grained authorization. The second part of this research focuses on how to improve the functionality of page-to-page **server**. We showed how to use hardware assisted locking of minipages (subdivisions of a page), which is already available on many well-known platforms, to overcome these limitations. Simulation results show that the minipage approach performs essentially as well as the standard page-to-page **server** when contention for data is light, while offering the ability to do fine-grained authorization. In addition, the minipage approach performs much better than the standard page-to-page **server** when there is much contention for data between clients.

 34/7,DE/18   (Item 3 from file: 35)
DIALOG(R)File   35:Dissertation Abs Online
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01386016 AADMM88356
A PROTOCOL FOR DISTRIBUTED UNIX SHELLS
   Author: BREITKREUTZ, TIMOTHY WAYNE
   Degree: M.SC.
   Year: 1993
   Corporate Source/Institution: UNIVERSITY OF ALBERTA (CANADA) (0351)
   Adviser: T. A. MARSLAND
   Source: VOLUME 33/01 of MASTERS ABSTRACTS.
             PAGE 210. 94 PAGES
   Descriptors: COMPUTER SCIENCE
   ISBN: 0-315-88356-1

   A protocol for shell programmes to harness distributed UNIX workstation computing resources on a network is proposed and evaluated. The protocol allows a shell, graphical desktop, or scripting language to execute its subcommands on other computers by contacting them as **servers**. In a decentralised fashion, **servers** only respond to requests that they are capable of fulfilling, preventing the need for a centralised **database, load**-balancing system, or capability service. Faster and more available **servers** inherently respond more quickly to service requests, improving the performance of the distributed system. Furthermore, a distributed shell allows users to ignore which system can run different commands, since only **servers** capable of executing a command by a given name will respond. The proposed protocol fills a gap between existing remote execution protocols, which are limited in their functionality, and fully distributed programming paradigms. The original UNIX philosophy of using a shell programme to piece together small programmes, thereby gaining flexibility and performance, is applied to the distributed environment.

3502962
Resource sharing digital libraries: a case study of Taiwan's InfoSpring
Digital Library Project.
Author(s): Ke, Hao-Ren (claven@cc.nctu.edu.tw); Chang, Ruei-Chuan
Corporate Source: National Chiao Tung University, Hsinchu, Taiwan ;
  National Chiao Tung University, Hsinchu, Taiwan
Library Collections, Acquisitions, & Technical Services vol. 24, no. 3
, pages 371-377
Publication Date: Fall 2000
ISSN: 1464-9055
Language: English
Document Type: Journal Article
Record Type: Abstract
Journal Announcement: 3507

   The InfoSpring Digital Library Project at National Chaio Tung University
is designed to establish mirror sites in Taiwan for well-known reference
databases and full-text electronic journals. The role of NCTU in this
project is to provide the hardware (including **servers** and storage
space) and network infrastructure, system maintenance, and data update. By
means of resource sharing, universities and industries in Taiwan can access
the **databases loaded** in the InfoSpring Digital Library under
certain subscription agreements. Realizing the importance of resource
sharing, libraries in Taiwan have organized a consortium to decide which
databases to be hosted in Taiwan and to negotiate competitive prices with
information providers. Outlines the motivation, current status,
experiences, and future directions of the InfoSpring Project, and
introduces the Taiwanese library consortium which it serves.

Descriptors: Library networks; Consortia; Resource sharing; Models

3401856
The new database aggregators.
Author(s): Garman, Nancy
Online vol. 23, no. 2, pages 6
Publication Date: March 1999
ISSN: 0146-5422
Language: English
Document Type: Journal Article
Record Type: Abstract
Journal Announcement: 3404

   No longer is collecting, formatting and **loading databases,**
designing search software and interfaces, and offering access and links the
sole province of major online services. Given the power and capabilities of
Web **servers** and software, librarians themselves have become
aggregators of databases and information, and they often beat the online
services at their own game by offering library customers better and more
specialized services. Overviews the historical role of academic libraries

as aggregators of electronic databases and creators of custom interfaces
and specialized collections for their customer base. Points out that the
advent of the Internet forced librarians to acquires all types of new
Web-based skills by building customized Websites of resources for their
patrons. Concludes that librarians are now building specialized, in-house,
online services on intranets, and delivering more customized services and
sources to their clients than a supermarket service ever dreamed possible.

Descriptors: Academic libraries; Internet; Library services; Online systems

 34/7,DE/21   (Item 3 from file: 202)
DIALOG(R)File 202:Info. Sci. & Tech. Abs.
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3202342
Providing   database   services   in   a   nationwide   research
organization--coexistence   of traditional information services and a modern
CD-ROM/online hybrid solution.
Author(s): Bowman, B F
Corporate Source: Max-Planck Institute of Biochemistry
Publication Date: 1996
Pages: 231-235
Conference Title: Proceedings of the 20th International Online Information
   Meeting
Conference Location: London
Conference Date: December 1996
Publisher: Learned Information, Ltd.
Language: English
Place of Publication: United Kingdom
Document Type: Conference Paper
Record Type: Abstract
Journal Announcement: 3200

   For the past two decades, the central Information Retrieval Services in
the Max Planck Society have been providing database searches for scientists
in Max Planck Institutes and Research Groups throughout Germany. As a
supplement to traditional search services offered by professional
intermediaries, the organization has recently fostered the introduction of
a new information system that can be accessed directly from all sites. Ovid
Technologies were chosen as partner for this project. Their common user
interfaces offers database-specific search tools for the expert as well as
for the novice user. Further advantages are the use of the TCP/IP protocol
allowing immediate access from a number of different computer platforms,
the client/**server** architecture and the adherence to the Z39.50
standard, thus providing interconnectivity with other library **servers**
. The possibility of using the Ovid Local **Loader** to install internal
databases under the same user interface as external databases was of
particular interest to the Institutes. The advantages of a CD-ROM interface
in combination with the performance of an online system ("CD-ROM/online
hybrid") has made this new service very popular among the scientists. Of
critical importance for the quality and success of the project was the
active participation of experienced information specialists during the
planning, testing, installation and final production stages.

Descriptors: Biochemistry; CD-ROM (Compact Disk-Read Only Memory); Client
   server systems; Computer architectures

34/7,DE/22   (Item 4 from file: 202)
DIALOG(R)File 202:Info. Sci. & Tech. Abs.

2902673
Extending retrieval strategies to networked environments: old ways, new
ways, and a critical look at WAIS.
Author(s): Marchionini, G; Hill, L
Corporate Source: Univ. of Maryland, College Park, MD
Journal of the American Society for Information Science   vol. 45, no. 8
, pages 561-564
Publication Date: Sep 1994
ISSN: 0002-8231
Language: English
Document Type: Journal Article
Record Type: Abstract
Journal Announcement: 2900

   This article discusses a comparative investigation, which was conducted
for the WAIS system and a Boolean-based information retrieval system in
networked environments. This brief communication reports preliminary
results from this study and makes suggestions for developers, evaluators,
and users. WAIS, which is the name of suite of programs using the client/
server architecture and is based on the NISO Z39.50 information
retrieval protocol, allows searchers using a variety of interface "clients"
to formulate queries which are translated into appropriate formats for
particular **"servers"** that contain the bibliographic or primary
information. For the study reported, three years of NASA's STI
Database was **loaded** at NASA using a commercial WAIS
server from WAIS, Inc. and a WAIS Macintosh client was used to
conduct searches for four topics identified by graduate students in
aerospace engineering at the University of Maryland. Limitations of the
Boolean-based retrieval systems (BBS), which have been enhanced to provide
capabilities such as field limits, proximity qualification, and term
weighting in the form of major or minor index terms, are discussed. This
study also illustrated several problems with the WAIS system, along with
the potentials for WAIS.

Descriptors: Boolean functions; Client **server** systems; Computer
  networks; Information retrieval

34/7,DE/23   (Item 5 from file: 202)
DIALOG(R)File 202:Info. Sci. & Tech. Abs.

2902059
On the horizon for academic libraries.
Author(s): Hattery, M
Corporate Source: EDITOR
Information Retrieval & Library Automation   vol. 30, no. 1, pages 1-3
Publication Date: Jun 1994
ISSN: 0020-0220
Language: English
Document Type: Journal Article
Record Type: Abstract
Journal Announcement: 2900

The article describes NOTIS Horizon, a UNIX-based, client/**server**
information management system designed for academic libraries. It reaches
beyond the campus with Z39.50-compliance for access to remote databases and
TCP/IP for the Internet. The UNIX base takes advantage of open systems
protocols to allow libraries to more easily **load databases**
locally. Image and full-text multimedia databases are supported as well as
document delivery of library materials, full-text documents, and images. It
is designed to adapt to policy changes: all system changes can be done
locally without vendor intervention. It is an integrated system that
includes OPAC, Cataloging and Authority Control, Circulation, Acquisitions
and Fund Accounting, Serials Control, and Reporting.

Descriptors: Academic libraries; Acquisitions; Authority files; Cataloging

 34/7,DE/24   (Item 6 from file: 202)
DIALOG(R)File 202:Info. Sci. & Tech. Abs.
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2800384
Rocky Mountain high-tech: LITA's Denver conference.
Author(s): Flagg, G
American Libraries vol. 23, no. 10, pages 836-844
Publication Date: Nov 1992
ISSN: 0002-9769
Language: English
Document Type: Journal Article
Record Type: Abstract
Journal Announcement: 2800

   This paper reports on the ALA's Library and Information Technology
Association meeting in 1992, focusing on virtual reality, CD-ROMs,
cataloging workstations, and remote access. Workshops on PC
troubleshooting, desktop publishing design, and other areas are also
reported on. Trends in providing electronic access to information,
including local **loading** of **databases** in PACs, community files
listing local clubs, graphics, imaging, multimedia, networking, and clinet/
server architecture are also discussed. The importance of Internet is
stressed.
Descriptors: Access; ALA (American library association); Architecture;
  CD-ROM (Compact disk-read only memory)

 34/7,DE/25   (Item 1 from file: 2)
DIALOG(R)File   2:INSPEC
(c) 2004 Institution of Electrical Engineers. All rts. reserv.

7891069   INSPEC Abstract Number: C2004-04-7820-015
  Title: Cooperative development environment of sign language animation
system using humanoid model
  Author(s): Yuizono, T.; Hara, K.; Nakayama, S.
  Author Affiliation: Dept. of Inf. & Comput. Sci., Kagoshima Univ., Japan
  Conference Title: Knowledge-Based Intelligent Information Engineering
Systems and Allied Technologies. KES 2002   Part vol.2   p.1038-42 vol.2
  Editor(s): Damiani, E.; Howlett, R.J.; Jain, L.C.; Ichalkaranje, N.
  Publisher: IOS Press, Amsterdam, Netherlands
  Publication Date: 2002 Country of Publication: Netherlands   2

vol.(xxv+xx+1409) pp.
   ISBN: 4 274 90535 7   Material Identity Number: XX-2003-00042
   Conference Title: Knowledge-Based Intelligent Information Engineering
Systems and Allied Technologies. KES 2002
   Conference Date: 16-18 Sept. 2002   Conference Location: Podere
d'Ombriano, Crema, Italy
   Language: English   Document Type: Conference Paper (PA)
   Treatment: Practical (P)

   Abstract: We have developed a sign language animation system made by
cooperative group. The system presents the animation of a 3D avatar
referred to a humanoid model. The system has been developed as a
multilayered system, which has middle **server** between animation
database **server** and 3D graphics client system. The two client systems
developed here are both Java3D application and Web based VRML client. Both
client systems support the same humanoid model and can show a sign language
shared with the same animation data. The **database** aims at **load**
balancer to make an avatar animation from a sign language word. Our
estimation of this system shows that 3D avatar animation is better than
both our early avatar animation system and printed document. (8 Refs)
   Subfile: C
   Descriptors: application program interfaces; client-**server** systems;
computer animation; groupware; Internet; Java; linguistics; natural
languages; virtual reality languages

 34/7,DE/26   (Item 2 from file: 2)

7853678   INSPEC Abstract Number: C2004-03-7840-012
   Title: Preliminary performance evaluation of an agent-based geospatial
data conflation system
   Author(s): Rahimi, S.; Bjursell, J.; Ali, D.; cobb, M.; Paprzycki, M.
   Author Affiliation: Dept. of Comput. Sci., Southern Illinois Univ.,
Carbondale, IL, USA
   Conference   Title: Proceedings IEEE/WIC International Conference on
Intelligent Agent Technology (IAT 2003)   p.550-3
   Editor(s): Liu, J.; Faltings, B.; Zhong, N.; Lu, R.; Nishida, T.
   Publisher: IEEE Comput. Soc, Los Alamitos, CA, USA
   Publication Date: 2003 Country of Publication: USA   xx+635 pp.
   ISBN: 0 7695 1931 8   Material Identity Number: XX-2003-02092
   U.S. Copyright Clearance Center Code: 0-7695-1931-8/03/$17.00
   Conference Title: 2003 IEEE/WIC International Conference on Intelligent
Agent Technology
   Conference Sponsor: IEEE Comput. Soc. Tech. Committee on Computational
Intelligence (TCCI); Web Intelligence Consortium (WIC)
   Conference Date: 13-16 Oct. 2003   Conference Location: Halifax, NS,
Canada
   Language: English   Document Type: Conference Paper (PA)
   Treatment: Practical (P)
   Abstract: A rapid growth of available geospatial data requires
development of systems capable of autonomous data retrieval, integration
and validation. Mobile agent technology may provide a suitable framework
for developing such systems since this technology can deal, in a natural
way, with the distributed heterogeneous nature of the data. We evaluate our
novel multi-agent architecture for geospatial data integration and compare
its performance with a client/**server** and a single-agent architecture.

We analyze the performance alteration for various numbers of participating
nodes,   amount   of **database** accesses, processing **loads,** and
network loads. (2 Refs)
   Subfile: C
   Descriptors: data handling; geographic information systems; information
retrieval; multi-agent systems; performance evaluation; visual databases
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  34/7,DE/27   (Item 3 from file: 2)
DIALOG(R)File   2:INSPEC
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7395801   INSPEC Abstract Number: C2002-11-6150N-025
 Title: An architecture for dynamic discovery service
   Author(s): Mandayam, J.; Hariri, S.
   Author Affiliation: Dept. of Electr. & Comput. Eng., Arizona Univ.,
Tucson, AZ, USA
   Conference Title: Proceedings of the ISCA 3rd International Conference
Information Reuse and Integration   p.68-73
   Editor(s): Smari, W.W.
   Publisher: Int. Soc. Comput. & their Applications - ISCA, Cary, NC, USA
   Publication Date: 2001   Country of Publication: USA   iii+153 pp.
   ISBN: 1 880843 41 2   Material Identity Number: XX-2002-01766
   Conference Title: Proceedings of the ISCA 3rd International Conference
Information Reuse and Integration
   Conference Sponsor: Int. Soc. Comput. & their Applications - ISCA
   Conference Date: 27-29 Nov. 2001   Conference Location: Las Vegas, NV,
USA
   Language: English   Document Type: Conference Paper (PA)
   Treatment: Practical (P)
   Abstract: The widespread deployment of inexpensive communications
technology, computational resources in the networking infrastructure, and
network-enabled end-devices pose an interesting problem: how to locate a
particular network service or a device out of millions of accessible
services and devices. Traditionally the services are registered in a
centralized database that can grow exponentially in size and thus makes
this approach inefficient as the **load** on the **database** and
network traffic increases as more clients access the service. In addition,
the centralized database becomes a single point of failure and it cannot
react to the dynamic changes in service attributes and client parameters.
In this paper, we present an architecture based on Java/Jini technology to
achieve dynamic registration and discovery of network services. The main
modules of our architecture include Lookup Service, Service Manager,
Attribute Repository, and Access Control Manager. We have developed
templates to register the network services and their attributes. We have
implemented a proof of concept prototype system based on our architecture
and discuss few examples on how to register and dynamically discover
network services. (9 Refs)
   Subfile: C
   Descriptors: client-**server** systems; information services; Internet;
Java; naming services; network operating systems; supervisory programs
   Copyright 2002, IEE

  34/7,DE/28   (Item 4 from file: 2)
DIALOG(R)File   2:INSPEC
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7344437   INSPEC Abstract Number: C2002-09-7210N-040
 Title: Load testing of Web sites
  Author(s): Menasce, D.A.
  Author Affiliation: George Mason Univ., Fairfax, VA, USA
  Journal: IEEE Internet Computing   vol.6, no.4   p.70-4
  Publisher: IEEE,
  Publication Date: July-Aug. 2002   Country of Publication: USA
  CODEN: IICOFX ISSN: 1089-7801
  SICI: 1089-7801(200207/08)6:4L.70:LTS;1-K
  Material Identity Number: F277-2002-004
  U.S. Copyright Clearance Center Code: 1089-7801/02/$17.00
  Language: English   Document Type: Journal Paper (JP)
  Treatment: Practical (P)

  Abstract: Developers typically measure a Web application's quality of
service in terms of response time, throughput, and availability. Poor QoS
translates into frustrated customers, which can lead to lost business
opportunities. At the same time, company expenditures on a Web site's IT
infrastructure are a function of the site's expected traffic. Ideally, you
want to spend enough, and no more, allocating resources where they will
generate the most benefit. For example, you should not upgrade your Web
servers if customers experience most delays in the **database
server** or **load** balancer. Thus, to maximize your ROI, you must
determine when and how to upgrade IT infrastructure. One way to assess IT
infrastructure performance is through load testing, which lets you assess
how your Web site supports its expected workload by running a specified set
of scripts that emulate customer behavior at different load levels. I
describe the QoS factors load testing addresses, how to conduct load
testing, and how it addresses business needs at several requirement levels.
(5 Refs)
  Subfile: C
  Descriptors: information resources; Internet; program testing; quality of
service
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 34/7,DE/29   (Item 5 from file: 2)
DIALOG(R)File   2:INSPEC
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7314849   INSPEC Abstract Number: C2002-08-6160B-007
  Title: Improvement of global transaction processing performance using
operation unit on distributed databases
  Author(s): Joong In Lee; Sang Kyun Cha; Young Kuk Kim; Seong Il Jin
  Author Affiliation: Dept. of Comput. Inf. Process., Daejon Health Sci.
Coll., South Korea
  Conference Title: Proceedings of the IASTED International Conference
Applied Informatics International Symposium on Software Engineering,
Databases, and Applications   p.412-17
  Editor(s): Hamza, M.H.
  Publisher: ACTA Press, Anaheim, CA, USA
  Publication Date: 2001 Country of Publication: USA   iv+526 pp.
  ISBN: 0 88986 322 9   Material Identity Number: XX-2002-00971
  Conference Title: Proceedings of the IASTED International Conference
Applied Informatics. International Symposium on Software Engineering,
Databases, and Applications
  Conference Sponsor: IASTED
  Conference Date: 18-21 Feb. 2002   Conference Location: Innsbruck,

Austria
  Language: English   Document Type: Conference Paper (PA)
  Treatment: Practical (P)
  Abstract: When a user   requests queries to a distributed database, the
global transaction manager generates as many internal operations as the
number of hosts participating in the distributed **database,** which
causes increased **load** to the **database** , and eventually the
performance decreases. The key to reducing the load and increasing the
performance is in the design of **server** architecture. We propose a
method for reducing the **server**'s load. We define operation units as
objects that have the same functions of the specified application domains.
One predefined operation unit is selected without generating lots of
internal transactions by a user's query. This operation unit is generated
by an internal transaction generator. We also propose a transaction
communicator architecture that is able to process a global transaction
internally. In addition, we introduce a transmission algorithm transferring
generated transactions to related sites efficiently in order to improve the
performance of global transaction processing. (7 Refs)
  Subfile: C
  Descriptors: distributed databases; file **servers**; query processing;
transaction processing
  Copyright 2002, IEE

 34/7,DE/30   (Item 6 from file: 2)
DIALOG(R)File   2:INSPEC
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7083231   INSPEC Abstract Number: C2001-12-6150N-093
 Title: Instant recall with XML data caching
  Author(s): Amos, T.
  Journal: WEB Techniques   vol.6, no.9   p.39-41
  Publisher: CMP Media Inc,
  Publication Date: Sept. 2001 Country of Publication: USA
  CODEN: WETEFA ISSN: 1086-556X
  SICI: 1086-556X(200109)6:9L.39:IRWD;1-6
  Material Identity Number: F184-2001-009
  Language: English   Document Type: Journal Paper (JP)
  Treatment: Practical (P)
  Abstract: When a Web application loses momentum as it gains more users,
customer complaints aren't far behind. That's when Web developers look for
ways to optimize application performance. But occasionally, even a Web
application that has a solid design from the outset is burdened by
performance problems. Because the typical three-tier Web application design
employs one or more Web **servers** and a single data store, one
all-too-common malady is slow response to database requests. By caching
database information on the Web **server** or application **server,**
you can relieve the database **server** of some of its repetitive work.
One way to do this is to create an in-memory database on the Web
server that maintains a copy of static, read-only information drawn
from the database. Not only does this enhance performance by reducing the
database load , but you also gain greater flexibility in how
your application can use the data. For example, the application could then
perform its own sorting, key lookups, and operations on data subsets. This
isn't as hard as it may sound. You can find a prebuilt solution in most
developers' toolkits: a good XML parser coupled with an XSLT processor
delivers everything you need, and more. (0 Refs)
  Subfile: C

Descriptors: cache storage; file **servers**; grammars; hypermedia
markup languages; Internet

34/7,DE/31   (Item 7 from file: 2)
DIALOG(R)File   2:INSPEC

6830372   INSPEC Abstract Number: B2001-03-6210C-016, C2001-03-6160B-004
   Title: Evolutionary algorithm performance profiles on the adaptive
distributed database management problem
   Author(s): Oates, M.J.
   Journal: BT Technology Journal   vol.18, no.4   p.66-77
   Publisher: British Telecommunications plc,
   Publication Date: Oct. 2000 Country of Publication: UK
   CODEN: BTJUEH ISSN: 1358-3948
   SICI: 1358-3948(200010)18:4L.66:EAPP;1-K
   Material Identity Number: O923-2000-004
   Language: English   Document Type: Journal Paper (JP)
   Treatment: Applications (A); Practical (P); Theoretical (T); Experimental
(X)
   Abstract: Evolutionary algorithms have been shown to be effective in
providing configuration optimisation to dynamic **load** balancing in
distributed **database** systems and Web **servers** . This paper
explores the tuning parameter performance profile of such techniques over a
variety of problems, including the adaptive distributed database management
problem (ADDMP), focusing on a range of interesting and important features.
The ability of the evolutionary search process to reliably find good
solutions to a dynamic problem in a minimal and consistent runtime is of
paramount importance when considering their application to real-time
industrial control problems. This paper demonstrates the existence of
certain optimal parameter values, particularly for the rate of applied
mutation, which are shown to produce consistently good problem solutions in
a low number of evaluations with a minimum standard deviation. (27 Refs)
   Subfile: B C
   Descriptors: adaptive systems; computer network management; distributed
databases; evolutionary computation; file **servers**; industrial control
; Internet; performance evaluation; quality of service

34/7,DE/32   (Item 8 from file: 2)
DIALOG(R)File   2:INSPEC

6751227   INSPEC Abstract Number: C2000-12-7210L-013
   Title: Resource sharing digital libraries: a case study of Taiwan's
InfoSpring Digital Library Project
   Author(s): Hao-Ren Ke; Ruei-Chuan Chang
   Author Affiliation: Nat. Chiao Tung Univ., Hsinchu, Taiwan
   Journal: Library Collections, Acquisitions, & Technical Services
vol.24, no.3   p.371-7
   Publisher: Elsevier,
   Publication Date: Fall 2000 Country of Publication: UK
   CODEN: LAPTDK ISSN: 1464-9055
   SICI: 1464-9055(200023)24:3L.371:RSDL;1-U
   Material Identity Number: H298-2000-004

Language: English   Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: The InfoSpring Digital Library Project conducted by National
Chiao Tung University (NCTU) is a project to establish mirror sites in
Taiwan for well-known reference databases and full-text electronic
journals. The role of NCTU in this project is to provide the hardware
(including **servers** and storage space) and network infrastructure,
system maintenance and data update. By means of resource sharing,
universities and industries in Taiwan can access the **databases
loaded** in the InfoSpring Digital Library under certain subscription
agreements. Realizing the importance of resource sharing, libraries in
Taiwan have organized a consortium to decide which databases to be hosted
in Taiwan and negotiate competitive prices with information providers. This
paper presents the motivation, current status, experiences, and future
directions of the InfoSpring Project and introduces the Taiwanese library
consortium which it services. (4 Refs)
   Subfile: C
   Descriptors: digital libraries; electronic publishing; full-text
databases; interlibrary loan; research libraries

   34/7,DE/33   (Item 9 from file: 2)
DIALOG(R)File   2:INSPEC

6708324   INSPEC Abstract Number: B2000-10-6430G-025, C2000-10-6160M-018
 Title: Resource prediction and admission control for interactive video
   Author(s): Aberer, K.; Hollfelder, S.
   Author Affiliation: GMD, Nat. Res. Center for Inf. Technol., Darmstadt,
Germany
   Conference Title: Database Semantics. Semantic Issues in Multimedia
Systems. IFIP TC2/WG2.6 Eighth Working Conference on Database Semantics
(DS-8)   p.27-46
   Editor(s): Meersman, R.; Tari, Z.; Stevens, S.
   Publisher: Kluwer Academic Publishers, Norwell, MA, USA
   Publication Date: 1999 Country of Publication: USA   xi+456 pp.
   ISBN: 0 7923 8405 9   Material Identity Number: XX-1999-00827
   Conference Title: Proceedings of 8th Working Conference on Database
Semantics
   Conference Date: 4-8 Jan. 1999   Conference Location: Rotorua, New
Zealand
   Language: English   Document Type: Conference Paper (PA)
   Treatment: Practical (P)
   Abstract: Highly interactive multimedia applications, like browsing in
video **databases,** generate strongly varying **loads** on the media
server during the presentation of media data. Existing admission
control approaches for limiting the number of concurrent users and thus
guaranteeing acceptable service quality are only suited for applications
with uniform load characteristics like video-on-demand. We propose a
session-oriented approach to admission control that is based on the
stochastical model of continuous-time Markov chains, which allows to
describe the different presentation states occurring in the interactive
access to the multimedia database. The model is derived from semantic
information on the forthcoming browsing session, In particular, it
considers the relevance of the videos to the user. In this way, a more

precise prediction on resource usage can be given for achieving the two
goals of quality of service (QoS) and good **server** utilization. The
admission control mechanism is part of a multimedia database architecture
for supporting efficient browsing in large video collections. (26 Refs)
   Subfile: B C
   Descriptors: interactive video; Markov processes; multimedia
communication; multimedia databases; multimedia **servers**; quality of
service; resource allocation; telecommunication congestion control; video
databases; video **servers**; visual communication
   Copyright 2000, IEE

 34/7,DE/34   (Item 10 from file: 2)
DIALOG(R)File   2:INSPEC
(c) 2004 Institution of Electrical Engineers. All rts. reserv.

6643591   INSPEC Abstract Number: C2000-08-6150N-074
 Title: Distributed processing system by History for load balancing
   Author(s): Yasumatsu, K.; Takeda, Y.; Murakoshi, H.; Funakubo, N.
   Author Affiliation: Dept. of Electr. Syst. Eng., Tokyo Metropolitan Inst.
of Technol., Japan
   Conference Title: Control in Natural Disasters (CND'98) Proceedings
volume from the IFAC Workshop   p.33-7
   Editor(s): Sano, A.; Ishii, R.
   Publisher: Elsevier Sci, Kidlington, UK
   Publication Date: 1999 Country of Publication: UK   vi+165 pp.
   ISBN: 0 08 043240 9   Material Identity Number: XX-1999-03029
   Conference Title: Proceedings of Control in Natural Disasters Workshop
   Conference Sponsor: IFAC; Soc. Instrum. & Control
   Conference Date: 21-22 Sept. 1998   Conference Location: Tokyo, Japan
   Language: English   Document Type: Conference Paper (PA)
   Treatment: Practical (P)
   Abstract: A method based on History, a database, is proposed for
balancing the computing load over a distributed processing system.
Communication costs are considered. History is a **database** of
load states learned using a self-organization feature map. Capsuled
objects of a class described in an object-oriented programming language are
distributed. The remote class controller (RCC) and remote class (RC) are
generated from the source class. RC are sent to the **servers** suggested
by History, and, by linking RCC, a main program can communicate with RC. As
a result, the load was balanced and the communication cost in execution
became low. (5 Refs)
   Subfile: C
   Descriptors: distributed processing; object-oriented databases;
object-oriented programming; resource allocation; self-organising feature
maps
   Copyright 2000, IEE
? ? t s73/ti/1-41

 73/TI/1   (Item 1 from file: 8)
DIALOG(R)File   8:(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

   Title: Online multicast routing with bandwidth guarantees: A new approach
using multicast **network** flow

 73/TI/2   (Item 2 from file: 8)
DIALOG(R)File   8:(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

Title: Jena: A semantic web toolkit

73/TI/3   (Item 3 from file: 8)
DIALOG(R)File   8:(c) 2004 Elsevier Eng.   Info. Inc. All rts. reserv.

  Title: Integration of content based image retrieval system with PACS

73/TI/4   (Item 4 from file: 8)
DIALOG(R)File   8:(c) 2004 Elsevier Eng.   Info. Inc. All rts. reserv.

   Title: Microcell automatic propagation measuring system combined with
management database - MAPS-MDB

73/TI/5   (Item 5 from file: 8)
DIALOG(R)File   8:(c) 2004 Elsevier Eng.   Info. Inc. All rts. reserv.

   Title: Some experience using OODB in the interoperation of heterogeneous
genome **database** systems

73/TI/6   (Item 6 from file: 8)
DIALOG(R)File   8:(c) 2004 Elsevier Eng.   Info. Inc. All rts. reserv.

   Title: Distributed real-time **database** for heterogeneous computer
control systems

73/TI/7   (Item 1 from file: 35)
DIALOG(R)File 35:(c) 2004 ProQuest Info&Learning. All rts. reserv.

A new bioinformatic resource: A heterotrimeric G-protein database (hGPDB)

73/TI/8   (Item 2 from file: 35)
DIALOG(R)File 35:(c) 2004 ProQuest Info&Learning. All rts. reserv.

INFORMATION MANAGEMENT IN NEXT GENERATION CIM SYSTEMS   (COMPUTER INTEGRATED
MANUFACTURING, RELATIONAL **DATABASES**)

73/TI/9   (Item 3 from file: 35)
DIALOG(R)File 35:(c) 2004 ProQuest Info&Learning. All rts. reserv.

NEURAL **NETWORK** MODELING AND OPTIMIZATION OF ZEOLITIC AUTOMOBILE
EXHAUST CATALYSTS

73/TI/10   (Item 1 from file: 202)
DIALOG(R)File 202:(c) 2004 EBSCO Publishing. All rts. reserv.

Computerized **database** system for an effective usage of the National
Infectious Disease Surveillance Scheme.

73/TI/11   (Item 2 from file: 202)
DIALOG(R)File 202:(c) 2004 EBSCO Publishing. All rts. reserv.

Query language execution on heterogeneous **database servers**
 using a bind-file bridge between application and **database** languages.

73/TI/12   (Item 1 from file: 65)
DIALOG(R)File 65:(c) 2004 BLDSC all rts. reserv. All rts. reserv.

E.Q.U.U.S.-A client-**server** laboratory **management database**
using spreadsheet clients
   CONFERENCE: Genome mapping and sequencing

73/TI/13   (Item 1 from file: 2)
DIALOG(R)File 2:(c) 2004 Institution of Electrical Engineers. All rts.
reserv.

Title: Information retrieval Z39.50 for protocol specification

73/TI/14   (Item 2 from file: 2)
DIALOG(R)File 2:(c) 2004 Institution of Electrical Engineers. All rts.
reserv.

  Title: A CORBA persistent state service based on a UML model to a
relational **database** mapping

73/TI/15   (Item 3 from file: 2)
DIALOG(R)File 2:(c) 2004 Institution of Electrical Engineers. All rts.
reserv.

   Title: Application of middleware in the three tier **client/
server** database design methodology

73/TI/16   (Item 4 from file: 2)
DIALOG(R)File 2:(c) 2004 Institution of Electrical Engineers. All rts.
reserv.

Title: Process model for round-trip engineering with relational database

73/TI/17   (Item 5 from file: 2)
DIALOG(R)File 2:(c) 2004 Institution of Electrical Engineers. All rts.
reserv.

  Title: Access to databases with Internet network-Internet database
connection mechanism

73/TI/18   (Item 6 from file: 2)
DIALOG(R)File 2:(c) 2004 Institution of Electrical Engineers. All rts.
reserv.

 Title: Database caching over the air-storage

73/TI/19   (Item 7 from file: 2)
DIALOG(R)File   2:(c) 2004 Institution of Electrical Engineers. All rts.
reserv.

  Title: Client-based transactions across database boundaries

73/TI/20   (Item 8 from file: 2)
DIALOG(R)File   2:(c) 2004 Institution of Electrical Engineers. All rts.
reserv.

  Title: Historical   pavement **management database** feasibility
study

73/TI/21   (Item 9 from file: 2)
DIALOG(R)File   2:(c) 2004 Institution of Electrical Engineers. All rts.
reserv.

  Title: The   new   space   and   Earth science information systems at NASA's
archive

73/TI/22   (Item 10 from file: 2)
DIALOG(R)File   2:(c) 2004 Institution of Electrical Engineers. All rts.
reserv.

  Title: KIWI: knowledge-based user-friendly system for the utilization of
information bases

73/TI/23   (Item 11 from file: 2)
DIALOG(R)File   2:(c) 2004 Institution of Electrical Engineers. All rts.
reserv.

  Title: Fast access to archival information stored on optical memory discs

73/TI/24   (Item 1 from file: 94)
DIALOG(R)File   94:(c)2004 Japan Science and Tech Corp(JST). All rts.
reserv.

An Implementation of **Network Management Database**.

73/TI/25   (Item 2 from file: 94)
DIALOG(R)File   94:(c)2004 Japan Science and Tech Corp(JST). All rts.
reserv.

Toward construction of a simple patent **database** covering the precious
    metal field.

73/TI/26   (Item 1 from file: 6)
DIALOG(R)File   6:(c) 2004 NTIS, Intl Cpyrght All Rights Res. All rts.
reserv.

Federal Implementation Guideline for Electronic Data Interchange: ASC X12
003070 Transaction Set 242 Data Status Tracking. Implementation Convention
  (Special pub)

  73/TI/27   (Item 2 from file: 6)
DIALOG(R)File   6:(c) 2004 NTIS, Intl Cpyrght All Rights Res. All rts.
reserv.

   Student Research Projects, 1993
   (Technical note)

  73/TI/28   (Item 3 from file: 6)
DIALOG(R)File   6:(c) 2004 NTIS, Intl Cpyrght All Rights Res. All rts.
reserv.

     Knowledge-Based   System   Analysis   and   Control   Defense   Switched
Network Task Areas
   (Annual rept. 1 Oct 87-30 Sep 88)

  73/TI/29   (Item 4 from file: 6)
DIALOG(R)File   6:(c) 2004 NTIS, Intl Cpyrght All Rights Res. All rts.
reserv.

   Multiple Channel Fast Orthogonalization **Network**
   (Patent)

  73/TI/30   (Item 5 from file: 6)
DIALOG(R)File   6:(c) 2004 NTIS, Intl Cpyrght All Rights Res. All rts.
reserv.

   Management Requirements of the 3COM Ethernet Local Area **Network**
   (Master's thesi)

  73/TI/31   (Item 6 from file: 6)
DIALOG(R)File   6:(c) 2004 NTIS, Intl Cpyrght All Rights Res. All rts.
reserv.

   Radial   Basis   Functions,   Multi-Variable   Functional   Interpolation   and
Adaptive **Networks**
   (Memorandum rept)

  73/TI/32   (Item 7 from file: 6)
DIALOG(R)File   6:(c) 2004 NTIS, Intl Cpyrght All Rights Res. All rts.
reserv.

   Konvergenzuntersuchung fuer einen Algorithmus zur Kompensation von Echos
mit Frequenzversatz in Fernsprechnetzen. (Convergence Investigation for An
Algorithm   for   The   Compensation   of   Echoes   with   Frequency   Displacement
Occuring in Telecommunication **Networks**)

73/TI/33   (Item 1 from file: 34)
DIALOG(R)File 34:(c) 2004 Inst for Sci Info. All rts. reserv.

Title: Immunological tolerance loss vs. erythrocyte self antigens and
    cytokine **network** disregulation in autoimmune hemolytic anaemia

73/TI/34   (Item 2 from file: 34)
DIALOG(R)File 34:(c) 2004 Inst for Sci Info. All rts. reserv.

Title: Genome-based peptide fingerprint scanning

73/TI/35   (Item 3 from file: 34)
DIALOG(R)File 34:(c) 2004 Inst for Sci Info. All rts. reserv.

Title: Cooperation in R&D in the pharmaceutical industry - The
    network as an organizational innovation governing technological
    innovation

73/TI/36   (Item 4 from file: 34)
DIALOG(R)File 34:(c) 2004 Inst for Sci Info. All rts. reserv.

Title: MULTIMEDIA **DATABASES**

73/TI/37   (Item 5 from file: 34)
DIALOG(R)File 34:(c) 2004 Inst for Sci Info. All rts. reserv.

Title: PHENODB - AN INTEGRATED CLIENT/**SERVER DATABASE** FOR
    LINKAGE AND POPULATION-GENETICS

73/TI/38   (Item 6 from file: 34)
DIALOG(R)File 34:(c) 2004 Inst for Sci Info. All rts. reserv.

Title: DNA WORKBENCH - A **DATABASE** PACKAGE TO **MANAGE** REGIONAL
    PHYSICAL MAPPING

73/TI/39   (Item 1 from file: 95)
DIALOG(R)File 95:(c) 2004 FIZ TECHNIK. All rts. reserv.

File allocation designs for distributed multimedia information
networks

73/TI/40   (Item 2 from file: 95)
DIALOG(R)File 95:(c) 2004 FIZ TECHNIK. All rts. reserv.

Internet mit Windows NT. Internet-Information-Server

73/TI/41   (Item 3 from file: 95)
DIALOG(R)File 95:(c) 2004 FIZ TECHNIK. All rts. reserv.

Supporting physical independence in an object **database server**

(Physikalische Datenabhaengigkeit in Objektdatenbanken)
? ? t s73/7,de/1-41

 73/7,DE/1   (Item 1 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

06526708
  E.I. No: EIP03387636944
  Title: Online multicast routing with bandwidth guarantees: A new approach
using multicast **network** flow
  Author: Kodialam, Murali; Sengupta, Sudipta; Lakshman, T.V.
  Corporate Source: Bell Laboratories Lucent Technologies, Holmdel, NJ
07733, United States
  Source: IEEE/ACM Transactions on Networking v 11 n 4 August 2003. p
676-686
  Publication Year: 2003
  CODEN: IEANEP   ISSN: 1063-6692
  Language: English
  Document Type: JA; (Journal Article)   Treatment: T; (Theoretical); X;
(Experimental)
  Journal Announcement: 0309W4
  Abstract: This paper presents a new algorithm for online routing of
bandwidth-guaranteed multicasts where routing requests arrive one by one
without there being any a priori knowledge of future requests. A multicast
routing request consists of a source s, a set of receivers R, and a
bandwidth requirement b. This multicast routing problem arises in many
contexts. Two applications of interest are routing of point-to-multipoint
label-switched paths in multiprotocol label switched (MPLS) networks, and
the provision of bandwidth-guaranteed virtual private network (VPN)
services under the "hose" service model left bracket 18 right bracket .
Offline multicast routing algorithms cannot be used since they require a
priori knowledge of all multicast requests that are to be routed. Instead,
online algorithms that **handle requests** arriving one by one and
that satisfy as many potential future demands as possible are needed. The
newly developed algorithm is an online algorithm and is based on the idea
that a newly routed multicast must follow a route that does not interfere
too much with network paths that may be critical to satisfy future
demands. We develop a multicast tree selection heuristic that is based on
the idea of deferred loading of certain critical links. These critical
links are **identified** by the algorithm as links that, if heavily
loaded, would make it impossible to satisfy future demands between certain
ingress-egress pairs. The presented algorithm uses link-state information
and some auxiliary capacity information for multicast tree selection and
is amenable to distributed implementation. Unlike previous algorithms, the
proposed algorithm exploits any available knowledge of the network
ingress-egress points of potential future demands, even though the demands
themselves are unknown, and performs very well. 23 Refs.
  Descriptors: *Multicasting; Bandwidth; Telecommunication networks; Signal
receivers; Network protocols; Quality of service; Algorithms

 73/7,DE/2   (Item 2 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

06274552
  E.I. No: EIP03047329568

Title: Jena: A semantic web toolkit
Author: McBride, Brian
Corporate Source: Hewlett-Packard Laboratories, Bristol, United Kingdom
Source: IEEE Internet Computing v 6 n 6 November/December 2002. p 55-58
Publication Year: 2002
CODEN: IICOFX   ISSN: 1089-7801
Language: English
Document Type: JA; (Journal Article)   Treatment: G; (General Review)
Journal Announcement: 0301W4

Abstract: The Semantic Web Activity at the World Wide Web Consortium aims
to augment the current Web with information that a computer can use in
applications that require machine understanding. As such, HP Labs
developed the Jena toolkit to make it easier to develop applications that
use the semantic Web information model and languages. Jena is a Java
application programming interface that is available as an open-source
download. (Edited abstract) 3 Refs.

Descriptors: World Wide Web; **Client server** computer systems;
Java programming language; Object oriented programming; Relational database
systems; Linguistics; Algorithms; Data communication systems

73/7,DE/3   (Item 3 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

05952758
E.I. No: EIP01496756625
Title: Integration of content based image retrieval system with PACS
Author: Ghanem, A.M.; Rasmy, M.E.M.; Kadah, Y.M.
Corporate Source: Biomedical Engineering Dept. Cairo University, Giza,
Egypt
Conference Title: Medical Imaging 2001- PACS and integrated Medical
Information Systems: Design and Evaluation
Conference Location: San Diego, CA, United States   Conference Date:
20010220-20010222
Sponsor: SPIE
E.I. Conference No.: 58755
Source: Proceedings of SPIE - The International Society for Optical
Engineering v 4323 2001. p 325-331
Publication Year: 2001
CODEN: PSISDG   ISSN: 0277-786X
Language: English
Document Type: CA; (Conference Article)   Treatment: A; (Applications); T
; (Theoretical)
Journal Announcement: 0112W3

Abstract: Content-based image retrieval (CBIR) provides a flexible means
of searching a digital image library based on the description of the
desired image. In this paper, we integrate CBIR, RIS, and HIS in PACS to
allow retrieving images of similar features. Once the system finds the
related images, the embedded CBIR retrieves the radiological reports and
medical records of the output images, which can be used to increase
diagnostic accuracy. The CBIR system is implemented on a separate server
based on multi-resolution image matching. To reduce the retrieval loading
on the server and network shanks, a procedure to use copies of images that
are temporarily located in some workstations in the PACS is applied. These
copies are stored on a temporary database space created on the different
workstations. A new image retrieval management server contains image
IDs in the **database** and the IP addresses of the workstations

containing temporary images copies. Data on the management server are
continuously updated with each addition or retrieval operation. When a
display workstation needs a specific image, it sends a request with the
required image ID to the management server, which in turn replies with the
IP of the workstation containing the inquired image ID. 10 Refs.
    Descriptors: Information retrieval systems; Medical imaging; Computer
software; Medical applications; Feature extraction; Systems analysis; Image
quality; Image analysis; Database systems; Internet; Network protocols;
Client server computer systems; Computer aided diagnosis

  73/7,DE/4   (Item 4 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

04771642
  E.I. No: EIP97083769751
   Title: Microcell automatic propagation measuring system combined with
management database - MAPS-MDB
  Author: Kawasaki, Ryoji; Suwa, Keisuke; Ichitsubo, Shinichi; Oyoshi,
Tomoyuki
  Corporate Source: NTT Multimedia System Lab Group, Jpn
  Source: NTT R&D v 46 n 5 1997. p 411-417
  Publication Year: 1997
  CODEN: NTTDEC   ISSN: 0915-2326
  Language: Japanese
  Document Type: JA; (Journal Article)   Treatment: T; (Theoretical)
  Journal Announcement: 9709W4
  Abstract: In order to meet the great demand for wireless communication
services, many efforts are underway to develop microcellular systems for
efficient frequency utilization and power reduction. This paper describes a
new microcell automatic propagation measuring system combined with a
client-server system of the **management database** - MAPS-MDB -,
which enables a computer-aided service-area to be drawn using the **map**
/cell-site **database** in the client-**server** system. (Translated
author abstract) 11 Refs.
  Descriptors: *Cellular radio systems; Database systems; Distributed
computer systems; Data processing; Computer applications

  73/7,DE/5   (Item 5 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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04641246
  E.I. No: EIP97033560921
   Title: Some experience using OODB in the interoperation of heterogeneous
genome **database** systems
  Author: Xu, Chuanbo; Razzak, Aamir; Saurugger, Peter N.
  Corporate Source: Pioneer Hi-Bred Int, Inc, Johnston, IA, USA
  Conference Title: Proceedings of the 1996 3rd Biennial Joint Conference
on Engineering Systems Design and Analysis, ESDA. Part 2 (of 9)
  Conference Location: Montpellier, Fr   Conference Date: 19960701-19960704
  Sponsor: ASME PD
  E.I. Conference No.: 46123
  Source: American Society of Mechanical Engineers, Petroleum Division
(Publication) PD v 74 n 2 1996. ASME, New York, NY, USA. p 53-61
  Publication Year: 1996

CODEN: ASMPEX
Language: English
Document Type: CA; (Conference Article)   Treatment: A; (Applications); T
; (Theoretical)
Journal Announcement: 9704W4

Abstract: With the power of encapsulation, object-oriented (OO) paradigm
and OO **database management** system (ODBMS) technology provides a
way to make an interoperable environment by hiding data diversities. We
have investigated this technique in the company's genome mapping and plant
breeding projects where multiple relational **databases,** home-grown
database, file system **server** and Internet data sources are
already in use. In our system, we first solved the incompatibility of the
object structures between the OO graphical user interface (GUI) and the
ODBMS using the Meta-Object Protocol (MOP) of Common Lisp Object system
(CLOS). The client objects are hence mirrored by the 'shadow objects' in
the ODBMS **server.** For the object **database** (OODB), domain
applications have been modeled with the Object Modeling Technique (OMT) and
the core genetic objects have been identified. In the heterogeneous
multidatabase system, the OODB plays the central repository role by storing
the schema of the relational production databases (RDBs) and the data
formatting information of the other external data sources to dispatch
queries, and by interfacing user applications with a unified object format.
An OO blackboard system is planned to hold these knowledge and to provide
the intelligent database features. In the system, third-party, non-OO
application programs are also integrated to provide the transparent data
access and analysis services. (Author abstract) 24 Refs.
Descriptors: *Database systems; Object oriented programming; Data
structures; Graphical user interfaces; Network protocols; LISP (programming
language); Expert systems

 73/7,DE/6   (Item 6 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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04246821
   E.I. No: EIP95092848075
   Title: Distributed real-time **database** for heterogeneous computer
control systems
   Author: Madan, R.S.; Arora, R.K.; Purkayastha, P.
   Corporate Source: Sagrik Process Analysts Pvt. Ltd, New Delhi, India
   Conference Title: Proceedings of the IEEE/IAS International Conference on
Industrial Automation and Control Conference
   Conference   Location: Hyderabad,   India   Conference   Date:
19950105-19950107
   E.I. Conference No.: 43515
   Source: IEEE/IAS International Conference on Industrial Automation and
Control, Proceedings 1995. IEEE, Piscataway, NJ, USA,95TH8005. p 435-440
   Publication Year: 1995
   CODEN: 002119
   Language: English
   Document Type: CA; (Conference Article)   Treatment: A; (Applications)
   Journal Announcement: 9511W1
   Abstract: We have developed a Real-Time Distributed Database Management
System (RTDDBMS) which manages data transparently in a heterogeneous,
geographically distributed and an open system environment. In our scheme,
the data is managed on each resource as a set of tables or relations.
Access to data is transparent of its physical location as access

requests are **handled** by the database kernel. A copy of the
database kernel resides on each node of the system. These kernels
communicate with each other and also with client applications. All
communications are through a set of predefined messages. The kernel does
not distinguish between messages received from client applications and
messages received from a remote kernel. Further, data is classified as
local, remote and replicated. When a kernel receives a request for access
to a particular data it checks to see if it is locally available. If it is
not, then the kernel checks to **identify** the node(s) at which it is
available. It then, like any client application, frames a message and sends
a request to the kernel of that remote node. The kernel that has the data,
which may be the local kernel, on receiving the request for the particular
data item performs the desired transaction on it. After performing the
transaction it returns the status of the transaction to the client
application. (Author abstract) 411 Refs.
   Descriptors: *Distributed database systems; Computer control systems;
Real time systems; Data communication systems; Classification (of
information); Geographic information systems; Data handling

 73/7,DE/7   (Item 1 from file: 35)
DIALOG(R)File   35:Dissertation Abs Online
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01917751 AADAAI3071994
A new bioinformatic resource: A heterotrimeric G-protein database (hGPDB)
   Author: Lila, Rahim Shokat
   Degree: Ph.D.
   Year: 2002
   Corporate Source/Institution: The University of Toledo (0232)
   Adviser: Steven M. Peseckis
   Source: VOLUME 63/11-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
            PAGE 5069. 162 PAGES
   Descriptors: BIOLOGY, MOLECULAR ; COMPUTER SCIENCE
   ISBN: 0-493-91864-7

     Bioinformatics is the computer-assisted analysis, management, and
manipulation of data related to biological systems. We have created a
bioinformatic web-based resource to enhance research in heterotrimeric
G-protein mediated signal transduction, a ubiquitous process that regulates
many cellular functions. This resource facilitates analysis of existing
physical and biological information as well as the formulation of
hypotheses for further research and experimentation. A large amount of
information relevant to heterotrimeric G-protein mediated signal
transduction exists. Our database offers advantages that include dramatic
decreases in the retrieval time of specified datatypes and access to
information otherwise beyond electronic analysis.
     Our heterotrimeric G-protein database is designed and developed to
accommodate large amounts of data linked by complex relationships. Through
the use of web pages and programs written in JAVA, the contents of the
database are accessible using a web browser. In formulating conceptual and
logical data models for the **database,** we **identified** a number of
data entities and relationships needed to generate a minimum virtual
representation of heterotrimeric G-protein mediated signal transduction.
These objects and relationships were then incorporated into the physical
programming and implementation of the database. In addition to the
development of the database and a web application to access it, a desk top
JAVA utility was written to facilitate the retrieval of the database's

information from public sources. Utilities to update, delete, or add
information to the underlying database were constructed. We integrated a
sequence alignment algorithm into the web application that allows users to
align protein sequences. We enhanced the alignment output by adding
color-coding. In addition to the interactive pages and tools that allow
controlled access and queries to the database, users can view static web
pages with information, links, and references related to heterotrimeric
G-proteins. The database is constructed to be flexible and scalable, able
to evolve and increase in utility with additional information and
functionalities. We are the first to achieve the physical implementation of
data, application, and presentation **client-server** layers
essential for a functional web-based database focused on heterotrimeric
G-protein mediated signal transduction.

   73/7,DE/8   (Item 2 from file: 35)
DIALOG(R)File   35:Dissertation Abs Online
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01566808 AAD9723141
INFORMATION MANAGEMENT IN NEXT GENERATION CIM SYSTEMS   (COMPUTER INTEGRATED
MANUFACTURING, RELATIONAL **DATABASES**)
   Author: PATANKAR, AJIT KRISHNA
   Degree: PH.D.
   Year: 1996
   Corporate Source/Institution: UNIVERSITY OF CALIFORNIA, BERKELEY (0028)
   Chair: ARIE SEGEV
   Source: VOLUME 58/02-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
             PAGE 897. 232 PAGES
   Descriptors: ENGINEERING, INDUSTRIAL ; COMPUTER SCIENCE ; OPERATIONS
             RESEARCH ; INFORMATION SCIENCE

     This dissertation proposes a new approach to information management in
Computer Integrated Manufacturing (CIM) systems. The approach is broadly
based on the application and extension o the 3rd generation (TG) database
technology. The TG databases subsume the second generation relational
databases and include substantial additional functionality such as, a
production rule system and database functions.
     The research identified the important information management needs in
CIM systems such as, flexibility, incremental automation, and distributed
control. A critical review of the literature showed that none of the
existing architectures were capable of meeting the information management
needs of CIM systems. Therefore, a novel CIM information management
architecture was proposed. In this architecture, manufacturing is modeled
as a network of machines and assign a computer workstation called a
'server' to each machine. The information processing requirements of a
production order or a lot are encapsulated in an object that migrates
between servers after completion of an appropriate service. An event and
rule based implementation and a layered approach allows the development of
CIM systems that can be easily reconfigured in response to changes in
products or processes. This architecture identifies two critical issues
which have not been addressed in the information systems literature,
namely, event **management** in active **databases** and a directory
schema for migrating object systems. Therefore, the focus of the research
was on these two issues.
     In the CIM architecture, it was shown that significant gains in
software productivity are possible if events in both the physical and
information world are supported in an uniform fashion in an active

database. This capability is lacking in existing active databases, hence a
new architecture and construction of an Event Manager was proposed. A
SQL-like language is proposed for the registration, subscription, and
cancellation of events. The notion of a renewal process for scedulable
events is introduced and implemented using an event stack mechanism. As
event histories can naturally be modeled as time series, temporal database
services are utilized for storing event metadata and histories. Futhermore,
it is shown that the proposed event management framework is capable of
supporting context dependent and relative temporal events.

In the CIM architecture, the location of objects is not fixed--a
problem that is not encountered in conventional distributed **databases**
or client-**server** systems. A directory scheme is proposed that is a
significant advance over similar proposals in the literature. A new
paradigm of objects reporting their location to a directory server is shown
to be more appropriate than the traditional method of directory servers
polling sites in the network. An enhancement to the distributed Linear
Hashing (LH*) algorithm is proposed for determining the appropriate server
for an object. A stochastic dynamic programming model has been developed to
minimize the total number of messages transmitted to maintain the use the
directory.

Next, the research was directed towards the implementation of a CIM
system. The implementation validated important new notions proposed in the
CIM architecture such as object mobility and event-rule based operation.
This prototype clearly shows the validity of the architecture. A natural
outcome of this implementation is an evaluation of the current
state-of-the-art in active, object-relational databases.

Also, as a part the implementation, a new methodology was proposed for
conceptual modeling in TG databases. This was required a a system design
methodology for these databases does not exist. (Abstract shortened by
UMI.)

 73/7,DE/9   (Item 3 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online
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01527248 AAD1382118
NEURAL **NETWORK** MODELING AND OPTIMIZATION OF ZEOLITIC AUTOMOBILE
EXHAUST CATALYSTS
  Author: SRINIVASAN, NITHYA
  Degree: M.S.
  Year: 1996
  Corporate Source/Institution: UNIVERSITY OF LOUISVILLE (0110)
  Director: RAUL MIRANDA
  Source: VOLUME 35/01 of MASTERS ABSTRACTS.
           PAGE 288. 56 PAGES
  Descriptors: ENGINEERING, CHEMICAL ; ARTIFICIAL INTELLIGENCE ;
                ENGINEERING, AUTOMOTIVE

     Recent research in automobile exhaust catalysts addresses the
substitution of platinum-group metals Pt, Pd and **Rh** by metals such as
Cu, Co, Ag, Zn, Mn and Sr impregnated on zeolites, TiO_2 or ZrO_2
carriers. Experimentally designing an exhaust catalyst to convert the
pollutants such as hydrocarbons (HC), carbon monoxide (CO) and nitrogen
oxides (NO_{x}) into H_2O, CO_2 and N_2 is expensive and
time consuming. With the objective of **identifying** a simulation
technique robust enough to be adaptable for designing catalysts, neural
networks have been used to correlate the catalyst synthesis variables and

the resulting exhaust conversions, and hence determine the optimum catalyst composition and operating conditions for a specified exhaust conversion.
    A back-propagation algorithm was used to train the network and the optimum architecture consisted of two hidden layers with 45 and 60 neurons in the first and second hidden layers respectively. The effects of learning factor and momentum gain coefficient were studied. The effects of the operating and compositional parameters on $NO\rm\sb{x}$ conversion by Cu-ZSM-5 were found.

 73/7,DE/10   (Item 1 from file: 202)
DIALOG(R)File 202:Info. Sci. & Tech. Abs.
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3804453
Computerized **database** system for an effective usage of the National Infectious Disease Surveillance Scheme.
Author(s): Hasegawa, Shinsaku; Inoue, Masashi; Suyama, Akihiko
Corporate Source: Hokkaido Institute of Public Health, Hokkaido 060-0819,
  Japan ; Tottori University, Tottori 683-8504, Japan ; Radiation Effects
  Research Foundation, Nagasaki 850-0013, Japan
Joho Kanri (Journal of Information Processing and Management) vol. 46
, no. 6, pages 383-388
Publication Date: September 2003
ISSN: 0021-7298ISSN (electronic): 1347-1597
Journal URL: http://johokanri.jstage.jst.go.jp/ja/
Publisher URL: http://www.jst.go.jp/EN/
Language: Japanese
Document Type: Journal Article
Record Type: Abstract
Journal Announcement: 3809

    The effective use of information gathered by Japan's National Infectious Diseases Surveillance Scheme is indispensable for early detection and prevention of these diseases. Describes the database system developed by the authors to distribute the information via the Internet using Apache as the Web **server,** MySQL as the **database management** system,
and PHP script and GD library to automatically create graphic data such as visualized maps, graphs, and bar charts. Explains that the system provides warning information of prevalent diseases and uses scalable vector graphics (SVG) to display chronological and location progress in disease prevalence.

Descriptors: Biomedical information; Information resources **management**
  ; **Databases;** Design

 73/7,DE/11   (Item 2 from file: 202)
DIALOG(R)File 202:Info. Sci. & Tech. Abs.
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2900042
Query language execution on heterogeneous **database servers**
 using a bind-file bridge between application and **database** languages.
Author(s): Adair, J G; Demers, R.A.; Ecimovic, D.; Grafe, R.J.; et al.
Patent Number(s): US 5257365
Publication Date: Oct 26, 1993
Language: English
Document Type: Patent

Record Type: Abstract
Journal Announcement: 2900

   Application programs which are developed and scheduled within a first
computing system environment are permitted to access relational data
registered at a remote **database management** system (DBMS)
operating in a second computing environment dissimilar to the first
computing environment. Access to data through the DBMS from an application
execution site remote from the DBMS is supported by a process, logically
subordinate to the application program which maps application program data
access requests to the DBMS.

Descriptors: Computer programs; **Database management** systems;
   Patents; Query languages

 73/7,DE/12   (Item 1 from file: 65)
DIALOG(R)File   65:Inside Conferences

01512408   INSIDE CONFERENCE ITEM ID: CN015014152
E.Q.U.U.S.-A client-**server** laboratory **management database**
using   spreadsheet clients
   Brown, C. G.; Hodgson, D.; Dear, S.; Durbin, S.
   CONFERENCE: Genome mapping and sequencing-Meeting
   ABSTRACTS OF PAPERS PRESENTED AT THE MEETING ON GENOME MAPPING AND
   SEQUENCING, 1996 P: 37
   Cold Spring Harbor Laboratory, 1996
   LANGUAGE: English   DOCUMENT TYPE: Conference Abstracts and programme
     CONFERENCE SPONSOR: Cold Spring Harbor Laboratory (CSH)
     CONFERENCE LOCATION: Cold Spring Harbor, NY
     CONFERENCE DATE: May 1996 (19960) (19960)
   DESCRIPTORS: genome mapping; CSH

 73/7,DE/13   (Item 1 from file: 2)
DIALOG(R)File   2:INSPEC

7753147   INSPEC Abstract Number: C2003-11-7250-013
 Title: Information retrieval Z39.50 for protocol specification
 Author(s): Mahar, F.
 Author Affiliation: Dept. of Electr. Eng. & Comput. Sci., Balochistan
Univ. of Eng. & Technol., Khuzdar, Pakistan
 Journal: Pakistan Journal of Information and Technology   vol.2, no.2
p.140-7
 Publisher: Science Publications,
 Publication Date: April-June 2003 Country of Publication: Pakistan
 CODEN: PJITAL   ISSN: 1682-6027
 SICI: 1682-6027(200304/06)2:2L.140:IRPS;1-0
 Material Identity Number: N537-2003-003
 Language: English   Document Type: Journal Paper (JP)
 Treatment: Practical (P)
 Abstract: An information retrieval service describes an activity between
two applications: an initiating application, the client, and a responding
application,   the   server. The server is associated with one or more
databases. Communication between **client** and **server** is carried
out by the Z39.50 protocol. The protocol specifies format and procedures

governing the exchange of messages between **client** and **server,**
thus enabling a **client** to request that the server searches a
database and **identifies** records that meets specified criteria
and retrieves some or all of the identified records. This paper describes
the protocol procedures, protocol model, rules of extensibility, general
and specific conformance requirements and detail requirements for the
protocol addresses communication between the **client** and **server.**
   (5 Refs)
  Subfile: C
  Descriptors: **client-server** systems; information retrieval;
protocols
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   73/7,DE/14   (Item 2 from file: 2)
DIALOG(R)File   2:INSPEC
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7726274   INSPEC Abstract Number: C2003-10-6110J-004
  Title: A CORBA persistent state service based on a UML model to a
relational **database** mapping
  Author(s): Mitterdorfer, S.; Teiniker, E.; Kreiner, C.; Weiss, R.;
Kovacs, Z.
  Author Affiliation: Inst. for Tech. Informatics, Graz Univ. of Technol.,
Austria
  Conference Title: Proceedings of the IASTED International Conference
Information Systems and Databases   p.55-60
  Editor(s): Kiyoki, Y.; Yoshikawa, M.; Tanaka, K.
  Publisher: ACTA Press, Anaheim, CA, USA
  Publication Date: 2002 Country of Publication: USA   ii+294 pp.
  ISBN: 0 88986 362 8   Material Identity Number: XX-2003-00707
  Conference Title: ISDB'02: IASTED International Conference on Information
Systems and Databases
  Conference Sponsor: IASTED
  Conference Date: 25-27 Sept. 2002   Conference Location: Tokyo, Japan
  Language: English   Document Type: Conference Paper (PA)
  Treatment: Practical (P)
  Abstract: In recent years, middleware industry, and particularly the
CORBA project, have strongly integrated several aspects derived from
databases: persistence, transaction **management,** security, etc.
However, there still is a conceptual "impedance mismatch" between the CORBA
concepts and the concepts used in connection with databases (often referred
to as a foundation of persistence). Bridging this gap often leads to
significant developing effort. We show a mapping of UML classes
(components) to relational databases and focus our work on dynamically
generated CORBA interfaces. Starting with an UML model represented in the
XML Metadata Interchange (XMI) format, a code generator writes consistent
interface definitions and SQL scripts for relational database schema
manipulation. This provides enough details for a **database** access
server to allow the building of a database access code at run-time.
The server is based on the CORBA Dynamic Skeleton Interface (DSI). (16
 Refs)
  Subfile: C
  Descriptors: distributed object management; hypermedia markup languages;
meta data; middleware; object-oriented databases; persistent objects;
relational databases; specification languages; SQL
  Copyright 2003, IEE

73/7,DE/15   (Item 3 from file: 2)
DIALOG(R)File   2:INSPEC
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6960748   INSPEC Abstract Number: C2001-08-6160B-001
   Title: Application of middleware in the three tier **client/
server** database design methodology
   Author(s): Fong, J.; Hul, R.
   Journal: Journal of the Brazilian Computer Society   vol.6, no.1
   Publication URL: http://www.scielo.br/jbcos.htm
   Publisher: Soc. Brasileira de Computacao,
   Publication Date: 1999 Country of Publication: Brazil
   ISSN: 0104-6500
   Material Identity Number: H782-2001-001
   Language: English   Document Type: Journal Paper (JP)
   Treatment: Practical (P)

   Abstract: With the popularity of personal computers and powerful
workstations, today's users are no longer satisfied with traditional data
processing. They demand the easy addition of graphics to applications,
putting pressure on system re-engineering. The **client-server**
architecture is a low risk approach to add a graphical user interface for
users. The developer has to determine the data and program logic
distribution between the **client**, the middleware **server**, and the
top tier server. Middleware links software running on different platforms.
It plays an important role in the 3 tier architecture. There are two types
of middleware: the first connects **client** programs to **server**
programs, and the second provides data access to heterogeneous data
sources. The developer needs to separate online transaction processing,
project-oriented data processing, and historical data from each other. This
paper outlines a methodology to design a 3 tier **client server**
database system. It **identifies** the role of middleware as
temporary storage for better performance, and as a database gateway for
DBMS connectivity. Case studies are used for illustration of the steps
involved. (14 Refs)
   Subfile: C
   Descriptors: application program interfaces; **client-server**
systems; distributed databases
   Copyright 2001, IEE

73/7,DE/16   (Item 4 from file: 2)
DIALOG(R)File   2:INSPEC
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6818744   INSPEC Abstract Number: C2001-02-6160D-009
   Title: Process model for round-trip engineering with relational database
   Author(s): Maciaszek, L.A.
   Author Affiliation: Dept. of Comput., Macquarie Univ., Sydney, NSW,
Australia
   Conference Title: Challenges of Information Technology Management in the
21st Century. 2000 Information Resources Management Association
International Conference   p.468-72
   Publisher: Idea Group Publishing, Hershey, PA, USA
   Publication Date: 2000 Country of Publication: USA   1227 pp.
   ISBN: 1 878289 84 5   Material Identity Number: XX-2000-00984
   Conference Title: Proceedings of 2000 Information Resources Management
Association International Conference

Conference Date: 21-24 May 2000   Conference Location: Anchorage, AK,
USA
   Language: English   Document Type: Conference Paper (PA)
   Treatment: Applications (A); Practical (P)
   Abstract: Iterative and incremental development of **client/
server** database systems requires a round-trip engineering support, in
particular in a design-implementation cycle. This paper identifies some
more difficult round-trip engineering scenarios and defines processes
needed to handle those scenarios. The processes conform to the current
state-of-the-practice in forward and reverse engineering with relational
databases. The paper **identifies** limitations of a tool-driven
round-trip engineering. The limitations can be linked to three reasons: (1)
the inability of a CASE/4GL tool to always generate correct incremental
code after schema has been changed, (2) the need for a CASE/4GL to
understand the reverse-engineered procedural parts written (or modified) in
the implementation phase, (3) the requirement that a database content
(extension) be reinstated at the end of each design-implementation cycle.
Technical limitations introduce a risk that design models and a database
implementation become misaligned and the design-implementation cycle cannot
be continued for iterative and incremental software production. Project
managers need a process model to impose necessary rigour on design and
programming teams to alleviate technical restrictions. The paper defines a
project management strategy that enforces appropriate automated and manual
processes on database development teams. (14 Refs)
   Subfile: C
   Descriptors: relational databases; reverse engineering; software
development management; software process improvement
   Copyright 2001, IEE

 73/7,DE/17   (Item 5 from file: 2)
DIALOG(R)File   2:INSPEC
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6002152   INSPEC Abstract Number: B9810-6210L-017, C9810-7210-005
   Title: Access to databases with Internet network-Internet database
connection mechanism
   Author(s): Ciesla, S.
   Author Affiliation: Inst. Inf., Politech. Slaska, Poland
   Journal: Zeszyty Naukowe Politechniki Slaskiej, Seria: Informatyka
no.32   p.415-26
   Publisher: Wydawnictwo Politech. Slaskiej,
   Publication Date: 1997 Country of Publication: Poland
   CODEN: ZNPIET ISSN: 0208-7286
   SICI: 0208-7286(1997)32L.415:ADWI;1-J
   Material Identity Number: H071-98006
   Language: Polish   Document Type: Journal Paper (JP)
   Treatment: Practical (P)
   Abstract: The article discusses access to databases through the Internet
using the mechanism: Internet Database Connector. The article is divided
into seven parts. The first one discusses ideology of access to remote
databases from Internet's point of view using HTTP protocol and HTML
language for this purpose. The second part describes characteristic of
Internet Database Connector method and the possibility of using this method
of Internet server. The interface between **IDC** and **database** by
means of ODBC connectivity is also described. The third section discusses
an idea of how IDC works. Web browsers submit a request to the Internet
server by using HTTP. The Internet server responds with a document

formatted in HTML. Access to databases is accomplished through a component of the Internet Information Server called the Internet **Database** Connector. The **IDC** , main component Httpodbc.dll, is an ISAPI DLL that uses ODBC to gain access to databases. The fourth part describes the way to contact with **databases**. The **IDC** uses two types of files to control how the database is accessed and how the output Web page is constructed. These files are Internet **Database** Connector (.**IDC**) files and HTML extension (.HTX) files. The next part discusses the security aspects of using database access via Internet, and secure data from being locally accessed by the user. (4 Refs)
   Subfile: B C
   Descriptors: **client-server** systems; hypermedia; Internet;
online front-ends; page description languages; protocols
   Copyright 1998, IEE

 73/7,DE/18   (Item 6 from file: 2)
DIALOG(R)File   2:INSPEC
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5878298   INSPEC Abstract Number: B9805-6210L-052, C9805-6160B-019
 Title: Database caching over the air-storage
   Author(s): Hong Va Leong; Si, A.
   Author Affiliation: Dept. of Comput., Hong Kong Polytech. Univ., Hung Hom, Hong Kong
   Journal: Computer Journal   vol.40, no.7   p.401-15
   Publisher: Oxford University Press for British Comput. Soc,
   Publication Date: 1997 Country of Publication: UK
   CODEN: CMPJA6 ISSN: 0010-4620
   SICI: 0010-4620(1997)40:7L.401:DCOS;1-H
   Material Identity Number: C022-98002
   Language: English   Document Type: Journal Paper (JP)
   Treatment: Practical (P)
   Abstract: Previous research on broadcast databases in a mobile computing environment utilizing wireless channels has been focused on mechanisms for a mobile client to selectively pick database items in which the client is interested from a broadcast channel. The fundamental issue of **identifying** the appropriate **database** items for broadcast or refrained from being broadcast have largely been ignored. In this paper, we consider the concept of "air-storage", by treating the wireless broadcast media as a layer of cache storage. Broadcasting database items over the air-storage becomes similar in spirit to the caching of database items from the database server. Similarly, determining which database items need to be broadcast or refrained from being broadcast becomes similar in nature to cache management. Existing caching mechanisms are reviewed and management issues specific to the new air-storage are raised and discussed. In view of new issues in air-storage management, we propose and investigate several mechanisms in selecting the proper database items to be placed over this new layer of air-storage under a variety of data access patterns. Finally, the effectiveness of the mechanisms is evaluated by means of simulated experiments and the results are discussed. (21 Refs)
   Subfile: B C
   Descriptors: cache storage; **client-server** systems;
distributed databases; information networks; mobile radio; wireless LAN
   Copyright 1998, IEE

 73/7,DE/19   (Item 7 from file: 2)

5870521   INSPEC Abstract Number: C9805-6160B-008
   Title: Client-based transactions across database boundaries
   Author(s): Weihai Yu; Rafaelsen, H.O.
   Author Affiliation: Dept. of Comput. Sci., Tromso Univ., Norway
   Conference   Title: Data Mining, Data Warehousing and Client/Server
Databases. Proceedings of the 8th International Database Workshop   p.
285-97
   Editor(s): Fong, J.
   Publisher: Springer-Verlag Singapore, Singapore
   Publication Date: 1997 Country of Publication: Singapore   xi+332 pp.
   ISBN: 981 3083 54 9   Material Identity Number: XX98-00279
   Conference Title: Proceedings of 8th International Hong Kong Computer
Society Database Workshop. Data Mining, Data Warehousing and Client/Server
Databases
   Conference Sponsor: Oracle Syst. Hong Kong; NCR (Hong Kong); Sybase Hong
Kong; Hewlett-Packard Hong Kong; et al
   Conference Date: 29-31 July 1997   Conference Location: Hong Kong
   Language: English   Document Type: Conference Paper (PA)
   Treatment: Practical (P)
   Abstract: When database services are offered in a distributed environment
such as the World Wide Web, one of the issues is to maintain the
consistency of the user's requests over multiple **database** systems. We
identify the characteristics of such an environment and argue that
existing approaches to transaction management across database boundaries
are not appropriate for such an environment. We propose a client-based
approach for transaction management that avoids the problems of the
existing approaches. Despite the restrictions of the approach, it is simple
to implement, maintains system autonomy and guarantees the necessary
consistency properties. (9 Refs)
   Subfile: C
   Descriptors: **client-server** systems; concurrency control; data
integrity; distributed databases; Internet; transaction processing
   Copyright 1998, IEE

 73/7,DE/20   (Item 8 from file: 2)

4468232   INSPEC Abstract Number: C9310-7190-010
   Title: Historical pavement **management database** feasibility
study
   Author(s): Svalstad, D.K.; Kephart, E.M.; Baird, G.T.; Eslinger, N.M.
   Author Affiliation: RE/SPEC Inc., Rapid City, SD, USA
   Conference Title: Microcomputer in Transportation. Proceedings of the 4th
International Conference   p.584-95
   Editor(s): Chow, J.; Litvin, D.M.; Opiela, K.S.
   Publisher: American Soc. Civil Eng, New York, NY, USA
   Publication Date: 1993 Country of Publication: USA   viii+860 pp.
   ISBN: 0 87262 875 2
   Conference Sponsor: American Soc. Civil Eng.; American Assoc. State
Highway & Transp. Officials; et al
   Conference Date: 22-24 July 1992   Conference Location: Baltimore, MD,
USA
   Language: English   Document Type: Conference Paper (PA)

Treatment: Practical (P)
Abstract: Technological and operational issues related to implementing a
historical   database   to   support   the   South   Dakota   Department of
Transportation's current and future pavement management activities are
addressed. Representative statewide historical transportation databases are
examined   for   potential   direct   implementation   by   South Dakota, and a
conceptual client-**server** relational **database** design that will
provide the required flexibility, extensibility, and functionality is
presented. The conceptual design addresses operational and design issues
related to data integrity and consistency, provides desk-top microcomputer
access   to   South Dakota's historical highway system information, and
provides a basis for future extension to a truly distributed environment
that integrates geographic information system and mapping databases as well
as highway imaging systems. (1 Refs)
   Subfile: C
   Descriptors: microcomputer applications; relational databases; town and
country planning

   73/7,DE/21   (Item 9 from file: 2)
DIALOG(R)File   2:INSPEC

03723824   INSPEC Abstract Number: B90064157, C90065437
   Title: The new space and Earth science information systems at NASA's
archive
   Author(s): Green, J.L.
   Author Affiliation: NASA Goddard Space Flight Center, Greenbelt, MD, USA
   Journal: Government Information Quarterly   vol.7, no.2   p.141-7
   Publication Date: 1990 Country of Publication: UK
   CODEN: GIQUEU ISSN: 0740-624X
   Language: English   Document Type: Journal Paper (JP)
   Treatment: Practical (P)
   Abstract: The National Space Science Data Center (NSSDC), established in
1967, serves as a long-term archive and distribution center for data
obtained on NASA space science flight investigations and provides a variety
of services. NASA science data at the NSSDC cover the disciplines of
astrophysics, planetary physics, and space plasma physics. Over 6000
gigabytes of digital data (125000 magnetic tapes) and 91 million feet of
film products from NASA science missions have been acquired by the NSSDC.
To **handle** the **requests** for both digital and film products, the
NSSDC has a variety of computer systems, both interactive and batch;
dedicated   photolaboratory   facilities;   large   online   **database**
management machines; and optical mass storage devices. It also
manages NASA's largest computer-to-computer wide area **network**. With
the ease of electronic access dramatically increasing, the NSSDC has
created a major new thrust by developing online computer information
systems accessible to remote users 24 hours a day. Currently, not all the
information about the NSSDC archive is accessible to remote users, and less
than 2 percent of the NSSDC's total digital data archive is online, but
these systems are already a major achievement in providing rapid access to
NASA-acquired   science data that is unprecedented in archive data
management. The author focuses on these new online interactive systems that
are used extensively over international computer **networks**.   (8 Refs)
   Subfile: B C
   Descriptors: aerospace computing; computer **networks**; geophysics
computing; government data processing; information services; physics
computing

73/7,DE/22   (Item 10 from file: 2)
DIALOG(R)File   2:INSPEC
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03208642   INSPEC Abstract Number: C88053317
  Title: KIWI: knowledge-based user-friendly system for the utilization of
information bases
  Author(s): Larsen, H.L.
  Author Affiliation: Dansk Datamatik Centre, Copenhagen, Denmark
  Conference Title: Knowledge Engineering - Expert Systems and Information
Retrieval   p.113-26
  Editor(s): Wormell, I.
  Publisher: Taylor Graham, London, UK
  Publication Date: 1987 Country of Publication: UK   182 pp.
  ISBN: 0 947568 30 1
  Conference Date: Dec. 1986   Conference Location: Copenhagen, Denmark
  Language: English   Document Type: Conference Paper (PA)
  Treatment: Practical (P)
  Abstract: The aim of KIWI is to provide the information user with an
intelligent and friendly interface for utilization of information in the
large   number   of   **databases**   available   from   **database**
management systems (DBMSs) and information retrieval systems (IRSs).
The retrieval of information is supported by an intermediary expert system.
The world and domain knowledge needed by this expert system is modelled by
term relationships forming a semantic **network**. The term relationships
refine the traditional term relationship types used in IR thesauri, such as
broaden and related, into the fundamental abstraction types classification,
generalization, and aggregation, as well as more domain specific
relationship types. Specifically, the term relationships are used for
information space zooming in the **handling** of approximate
requests (or goals). (5 Refs)
  Subfile: C
  Descriptors: expert systems; indexing; information retrieval; thesauri;
user interfaces

73/7,DE/23   (Item 11 from file: 2)
DIALOG(R)File   2:INSPEC
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02354457   INSPEC Abstract Number: C85002107
  Title: Fast access to archival information stored on optical memory discs
  Author(s): Bittner, H.; Kromker, D.; Lenzer, R.; Olsowski, H.D.
  Author Affiliation: Tech. Hochschule Darmstadt, West Germany
  Conference Title: Eurographics '83. Proceedings of the International
Conference and Exhibition   p.353-65
  Editor(s): Ten Hagen, P.J.W.
  Publisher: North-Holland, Amsterdam, Netherlands
  Publication Date: 1983 Country of Publication: Netherlands   xii+401
pp.
  ISBN: 0 444 86770 8
  Conference Date: 31 Aug.-2 Sept. 1983   Conference Location: Zagreb,
Yugoslavia
  Language: English   Document Type: Conference Paper (PA)
  Treatment: Practical (P)
  Abstract: A data processor based on a multi-microprocessor system

managing archival data was developed for the use in local area
networks . To grant fast and easy access from office workstations to
heterogeneous information stored on optical memory discs, a new strategy of
storing data and **handling** user **requests** was designed. (17
 Refs)
  Subfile: C
  Descriptors: computer **networks; database management**
systems; optical storage; video and audio discs

 73/7,DE/24   (Item 1 from file: 94)
DIALOG(R)File   94:JICST-EPlus
(c)2004 Japan Science and Tech Corp(JST). All rts. reserv.

05642194   JICST ACCESSION NUMBER: 03A0751954   FILE SEGMENT: JICST-E
An Implementation of **Network Management Database**.
OGAITO TATOKU (1); YAMASHITA YOSHINORI (1)
(1) Fukui Med. Sch.
Joho Shori Gakkai Kenkyu Hokoku, 2003, VOL.2003,NO.96(DSM-30), PAGE.1-6,
    FIG.2, TBL.1, REF.8
JOURNAL NUMBER: Z0031BAO   ISSN NO: 0919-6072
UNIVERSAL DECIMAL CLASSIFICATION: 621.394/.395   681.3:061.68
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication
ABSTRACT: Although management of LAN is very important item, the human
    resources we can assign to is limited. We have developed a system,
    which supports the registration of the terminal and LAN management,
    based on SQL **database server** and WWW. In the results, it
    releases members of information processing center from the simple but
    tedious work. (author abst.)
DESCRIPTORS: network management; database; WWW(communication);
    operation(management); SQL(software); communication administration;
    university
BROADER DESCRIPTORS: management; information system; computer application
    system; system; application oriented language; programming language;
    formal language; language; school

 73/7,DE/25   (Item 2 from file: 94)
DIALOG(R)File   94:JICST-EPlus
(c)2004 Japan Science and Tech Corp(JST). All rts. reserv.

00420808   JICST ACCESSION NUMBER: 87A0266583   FILE SEGMENT: JICST-E
Toward construction of a simple patent **database** covering the precious
    metal field.
KOSAKA REIKO (1)
(1) Tanaka Kikinzoku Kogyo Co., Ltd.
Joho Kagaku Gijutsu Kenkyu Shukai Happyo Ronbunshu(Proceedings of the
    Annual Meeting on Information Science and Technology), 1987, VOL.23rd,
    PAGE.135-141, FIG.2, TBL.4, REF.4
JOURNAL NUMBER: S0306ABA
UNIVERSAL DECIMAL CLASSIFICATION: 347.77+608   669:002
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Conference Proceeding
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication

ABSTRACT: TANAKA KIKINZOKU KOGYO K.K. manually searches about 2,000 patents
    per year limited to the claims concerning precious metals (Ag, Au, Pt,
    Pd, **Rh,** Ir, Ru and Os) and Re from Japanese Patent Gazette and
    Utility Model Gazette, which notifies them as applied. Taking these
    patents as information sources the titles and applicants were
    translated into English to make them available for foreign
    organizations. Bibliographical information essential to **identify**
    each record was also added. The database including the above items is
    compiled easily and concisely because a word processor is used for the
    input. The output format comprises a list of patents by precious metal
    element or international patent classification as well as a list of
    applicants in the alphabetical order by country origin. Comparisons of
    this database and that of PATOLIS Online Service are reported.(author
    abst.)
DESCRIPTORS: patent document; Japan; utility model; database; precious
    metal; patent classification; applicant; information retrieval system;
    word processor
BROADER DESCRIPTORS: publications; resource(document); East Asia; Asia;
    industrial property; intellectual property; right; metal;
    classification; information system; computer application system; system
    ; special purpose computer; computer; hardware

 73/7,DE/26   (Item 1 from file: 6)
DIALOG(R)File   6:NTIS
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2063669 NTIS Accession Number: PB98-134752/XAB
   Federal Implementation Guideline for Electronic Data Interchange: ASC X12
003070 Transaction Set 242 Data Status Tracking. Implementation Convention
    (Special pub)
    Favreau, J. P.
    National   Inst.   of   Standards   and   Technology   (ITL), Gaithersburg, MD.
Electronic Commerce Acquisition Program Management Office.
    Corp. Source Codes: 113284007
    Report Number: NIST/SP-881-29
    Jan 98   26p
    Languages: English
    Journal Announcement: GRAI9813
    Product   reproduced   from digital image. Order this product from NTIS by:
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fax at (703)321-8547; and email at orders ntis.fedworld.gov. NTIS is
located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
    NTIS Prices: PC A03/MF A01
    Country of Publication: United States
    This Draft Standard for Trial Use contains the format an establishes the
data contents of the Data Status Tracking Transaction Set (242) within the
context of an Electronic Data Interchange (EDI) environment. This
management transaction set is the vehicle by which the transmission status
information is conveyed by a service **request handler** to the
interchange sender, interchange receiver, or both; it can be used to
provide status information regarding interchange as it flows from an
interchange sender through one or more service **request handlers**
to an interchange receiver during its transmission cycle. It can be used by
the interchange sender or interchange receiver to request from a service
request handler ad hoc or periodic reports containing status
information regarding interchanges.
    Descriptors: Accounting; *Information systems; *Standards; *Contract

administration; *Procurement; Logistics **management**; Computer programs
; **Databases**; Data processing; Commerce; Computer **networks**;
Telecommunication; Acquisition; Government agencies; Industries; United
States; Scheduling; Purchasing; Electronic mail

  73/7,DE/27   (Item 2 from file: 6)
DIALOG(R)File   6:NTIS
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1787150 NTIS Accession Number: AD-A274 704/6
  Student Research Projects, 1993
  (Technical note)
  Yeske, L. A. ; Perrin, P. ; Petry, F. ; Moorhead, R. ; Zhu, Z.
  Mississippi State University, Stennis Space Center. Center for Air Sea
Technology.
  Corp. Source Codes: 106836001; 426578
  Report Number: CAST-TN-02-94
  31 Dec 93   25p
  Languages: English
  Journal Announcement: GRAI9409
  Order this product from NTIS by: phone at 1-800-553-NTIS (U.S.
customers); (703)605-6000 (other countries); fax at (703)321-8547; and
email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road,
Springfield, VA, 22161, USA.
  NTIS Prices: PC A03/MF A01
  Country of Publication: United States
  Contract Number: N00014-92-J-4109
  Eleven 1993 student research projects were sponsored by the Mississippi
State University Center for Air Sea Technology. This technical note
describes these projects which include knowledge discovery for ocean
modeling, scientific visualization enhancements, object-oriented access to
data, intelligent interfaces for defining data, data browsing, database
administrative tools, graphics support for ocean modeling, the Ocean
Visualization Interactive Research Toolkit, **client/server** model
access, database applications and their documentation, tactical
oceanography wide area network export grid, and **database** duplicate
identifiers. Technical note, Student, Research, CAST.
  Descriptors: *Data bases; *Oceanography; Access; Grids; Interfaces;
Mississippi; Models; Networks; Oceans; Students; Universities; Wide area
networks; Research management; Abstracts; Reports

  73/7,DE/28   (Item 3 from file: 6)
DIALOG(R)File   6:NTIS
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1465287 NTIS Accession Number: AD-A211 769/5
  Knowledge-Based System Analysis and Control Defense Switched
Network Task Areas
  (Annual rept. 1 Oct 87-30 Sep 88)
  Heggestad, H. M.
  Massachusetts Inst. of Tech., Lexington. Lincoln Laboratory
  Corp. Source Codes: 009875001; 207650
  Sponsor: Electronic Systems Div., Hanscom AFB, MA.
  Report Number: ESD-TR-88-314
  11 Jul 89   74p
  Languages: English

Journal Announcement: GRAI8924
Original contains color plates: All DTIC and NTIS reproductions will be in black and white.
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC A04/MF A01
Country of Publication: United States
Contract Number: F19628-85-C-0002
An Interactive Defense Switched Network Simulator (IDSIM) has been implemented, consisting of an enhanced Call-by-Call Simulator (CCSIM) in one computer interfaced with a Network Management Expert System (NMES) in a second computer. The operation of IDSIM is similar to that of a real-world theater Defense Switched Network (DSN) and its community of users, at a future time when the DSN is fully installed and an Expert System at each theater operations center performs DSN network management (NM) functions. Within IDSIM, NMES collects periodic activity reports from each simulated DSN switch in CCSIM, analyzes them to **identify** network problems, and
applies control commands to the simulated switcher to circumvent the problems as well as possible. By inducing network fault and overload conditions, applying controls, and studying the results, an experimenter can exploit IDSIM as a system engineering tool to develop NM strategies for the DSN. This report describes IDSIM as well as a set of NM study results obtained with this tool. The report also describes the applicability of CCSIM as a near-term training device for human DSN NM operators, and analyzes expert system applicability to Defense Data Network (DDN) management. **(RH)**
Descriptors: *Computer programs; *Computers; *Defense systems; *Networks; *Systems engineering; Communities; Faults; Management; Management planning and control; Overload; Reports; Theater level operations; Training devices

73/7,DE/29   (Item 4 from file: 6)
DIALOG(R)File   6:NTIS
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1462915 NTIS Accession Number: AD-D014 181/2
Multiple Channel Fast Orthogonalization **Network**
(Patent)
Gerlach, K.
Department of the Navy, Washington, DC.
Corp. Source Codes: 001840000; 110050
Report Number: PAT-APPL-6-761 648; PATENT-4 797 807
Filed 2 Aug 85 patented 10 Jan 89   8p
Languages: English   Document Type: Patent
Journal Announcement: GRAI8923
Supersedes PAT-APPL-6-761 648, AD-D011 918.
This Government-owned invention available for U.S. licensing and, possibly, for foreign licensing. Copy of patent available Commissioner of Patents, Washington, DC 20231 $1.50.
NTIS Prices: Not available NTIS
Country of Publication: United States
United States Patent. A method for orthogonalizing inputs with respect to each other. The method comprises the steps of : generating a root structure of N inputs having input order 1 to N, where 2 to (m-1) power < 2 to the m power and m is an integer >1; inverting the order of the root structure to generate an inverted root structure having input order N to 1; partially

orthogonalizing the root structure and the inverted root structure in
associated respective decorrelation circuits to remove inputs common to the
first 2 to (m-I) power inputs where I=1; splitting off two substructure
from the root structure, where the first structure has input order 1 to 2
to (m-I) power and the second substructure has input order 2 to (m-I) power
to 1, where I=1; splitting off two substructure from the inverted root
structure where the first substructure has input order 2m to 2 to (m-I)
power and the second substructure has input order 2 to(m-I) power to 2m,
where I=1; partially orthogonalizing each of the substructures in
associated respective decorrelation circuits to remove inputs common to
their first 2 to (m-I) power inputs, where I=2; and repeating the splitting
off steps and the subsequent partially orthogonalizing step until only one
input remains, where for each repetition the substructures that are
split-off are treated as new root structure and new inverted root
structure, and the value **identified** for I in each step is increased
by 1. Patents. **(RH)**
    Descriptors: *Circuits; *Patents; Inversion; Multichannel

  73/7,DE/30   (Item 5 from file: 6)
DIALOG(R)File   6:NTIS
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1416261 NTIS Accession Number: AD-A201 623/6
  Management Requirements of the 3COM Ethernet Local Area **Network**
  (Master's thesi)
  Geiger, B. K.
  Naval Postgraduate School, Monterey, CA.
  Corp. Source Codes: 019895000; 251450
  Sep 88   55p
  Languages: English   Document Type: Thesis
  Journal Announcement: GRAI8908
  Order this product from NTIS by: phone at 1-800-553-NTIS (U.S.
customers); (703)605-6000 (other countries); fax at (703)321-8547; and
email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road,
Springfield, VA, 22161, USA.
  NTIS Prices: PC A04/MF A01
  Country of Publication: United States
  The Marine Corps has installed 3COM Ethernet Local Area Networks (LANs)
at various sites upon implementation of the Recruit Services Management
Information System. With the introduction of new technology comes the
requirement to administer the network. This paper describes LAN services
available on the network, management philosophies for the LAN services, and
areas of LAN administration considered important to the successful
operation and maintenance of a LAN. LAN administration problems
identified by users are also addressed. Keywords included; Local area
network (LAN); Lan management; Lan administration; 3COM Ethernet LAN.
Theses. **(rh)**
    Descriptors: *Computer communications; *Communications networks;
Management; Marine Corps; Military requirements; Theses; Short
range(Distance); Management information systems; Recruiting

  73/7,DE/31   (Item 6 from file: 6)
DIALOG(R)File   6:NTIS
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1388703 NTIS Accession Number: AD-A196 234/9

Radial Basis Functions, Multi-Variable Functional Interpolation and
Adaptive **Networks**
  (Memorandum rept)
  Broomhead, D. S. ; Lowe, D.
  Royal Signals and Radar Establishment, Malvern (England).
  Corp. Source Codes: 053783000; 409929
  Sponsor: Defence Research Information Centre, Orpington (England).
  Report Number: RSRE-MEMO-4148; DRIC-BR-106143
  28 Mar 88   38p
  Languages: English
  Journal Announcement: GRAI8822
  Order this product from NTIS by: phone at 1-800-553-NTIS (U.S.
customers); (703)605-6000 (other countries); fax at (703)321-8547; and
email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road,
Springfield, VA, 22161, USA.
  NTIS Prices: PC A03/MF A01
  Country of Publication: United Kingdom
  The relationship between 'learning' in adaptive layered networks and the
fitting of data with high dimensional surfaces is discussed. This leads
naturally to a picture of 'generalization in terms of interpolation between
known data points and suggests a rational approach to the theory of such
networks. A class of adaptive networks is **identified** which makes the
interpolation scheme explicit. This class has the property that learning is
equivalent to the solution of a set of linear equations. These networks
thus represent nonlinear relationships while having a guaranteed learning
rule. Great Britain. **(RH)**
  Descriptors: *Adaptive systems; *Learning; *Networks; Data bases;
Interpolation; Layers; Multivariate analysis; Solutions(General); Surfaces

 73/7,DE/32   (Item 7 from file: 6)
DIALOG(R)File   6:NTIS
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1326409 NTIS Accession Number: TIB/B87-80654
  Konvergenzuntersuchung fuer einen Algorithmus zur Kompensation von Echos
mit Frequenzversatz in Fernsprechnetzen. (Convergence Investigation for An
Algorithm for The Compensation of Echoes with Frequency Displacement
Occuring in Telecommunication **Networks**)
  Schuetze, H.
  Deutsche Bundespost, Darmstadt (Germany, F.R.). Fernmeldetechnisches
Zentralamt.
  Corp. Source Codes: 008312001
  Report Number: FTZ-FI--444-TB-14
  Sep 86   46p
  Languages: German
  Journal Announcement: GRAI8723
  In German,
  Order this product from NTIS by: phone at 1-800-553-NTIS (U.S.
customers); (703)605-6000 (other countries); fax at (703)321-8547; and
email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road,
Springfield, VA, 22161, USA.
  NTIS Prices: PC E07
  Country of Publication: Germany, Federal Republic of
  Echo signals with frequency displacement can occur on telecommunication
networks. They can only be reduced by echo compensators if one can succeed
in **identifying** this frequency displacement. Algorithms are known
which can do this, but the conditions in which they behave in a stable

manner and converge have not previously been examined. This report supplies the proof of stability and convergence for an algorithm to compensate echoes with frequency compensation. The method shown here can also be transferred to other adaptive algorithms. (orig./**RHM**). (Copyright (c) 1987 by FIZ. Citation number 87:080654.)

Descriptors: *Echo suppressors; Telephony; Voice communication; Algorithms; Convergence; Stability; Damping tests; Frequency shift

73/7,DE/33   (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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12620859   Genuine Article#: 807HJ   Number of References: 36
Title: Immunological tolerance loss vs. erythrocyte self antigens and
    cytokine **network** disregulation in autoimmune hemolytic anaemia
Author(s): Fagiolo E   (REPRINT)
Corporate Source: Via Appia Nuova 633/I-00179 Rome//Italy/ (REPRINT); Univ
    Catholic Sacro Cuore,Immunohematol & Blood Transfus Unit,Rome//Italy/
Journal: AUTOIMMUNITY REVIEWS, 2004, V3, N2 (FEB), P53-59
ISSN: 1568-9972   Publication date: 20040200
Publisher: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS
Language: English   Document Type: ARTICLE
Abstract: Recent studies on animal and human autoinumme hemolytic anaemia
    (AIHA) suggest that the loss of immunological tolerance vs. erythrocyte
    (Er) self antigens (Ag) may be primed by different mechanisms:
    ignorance of Er self Ag.. molecular mimicry between self and non-self
    Ag, policlonal T and/or B cells activation, errors in central or
    peripheral tolerance, immunoregulatory disturbances including the
    alteration of cytokines network. In vitro stimulation by synthetic
    Rh peptides indicates that ignorant T and/or B cells from
    patients with AIHA may recognize criptic Er self Ag. The AIHA
    associated with bacterial or viral infections seems to be produced by
    policlonal T and/or B cell activation against foreign Ag that mimics
    protein or carbohydrate epitopes on Er. Policlonal activation of host B
    cell clones by donor T cells causes the AIHA in chronic
    graft-versus-host disease. Mouse lines expressing a transgene with
    autoantibody (autoAb) activity against murine Er have shown that
    non-deleted peripheral B cell clones may produce Er autoAb. In human a
    genetic defect of Fas/FasL autoreactive lymphocyte apoptosis may be
    associated with AlHA. Th1/Th2 cytokines or IL10/IL12 imbalance may
    induce AIHA: in NZB mice and in human AlHA there is an increased
    production of Th2 cytokines such as IL4 and IL10 but INF-gamma and IL12
    reduced production. Particularly, IL10 seems to act as critical
    mediator for the Er autoAb production. (C) 2003 Elsevier B.V. All
    rights reserved.
Descriptors--Author Keywords: immunological tolerance loss ; erythrocyte
    criptic antigens ; Th1/Th2 and IL10/IL12 cytokines imbalance ;
    autoimmune hemolytic anaemia

73/7,DE/34   (Item 2 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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11299635   Genuine Article#: 633WG   Number of References: 23
Title: Genome-based peptide fingerprint scanning
Author(s): Giddings MC (REPRINT) ; Shah AA; Gesteland R; Moore B

Corporate Source: Univ N Carolina,Dept Microbiol & Immunol,Chapel
    Hill//NC/27599 (REPRINT); Univ N Carolina,Dept Microbiol &
    Immunol,Chapel Hill//NC/27599; Univ N Carolina,Dept Biomed Engn,Chapel
    Hill//NC/27599; Univ Utah,Dept Human Genet,Salt Lake City//UT/84112
Journal: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED
    STATES OF AMERICA, 2003, V100, N1 (JAN 7), P20-25
ISSN: 0027-8424   Publication date: 20030107
Publisher: NATL ACAD SCIENCES, 2101 CONSTITUTION AVE NW, WASHINGTON, DC
    20418 USA
Language: English   Document Type: ARTICLE
Abstract: We have implemented a method that identifies the genomic origins
    of sample proteins by scanning their peptide-mass fingerprint against
    the theoretical translation and proteolytic digest of an entire genome.
    Unlike previously reported techniques, this method requires no
    predefined ORF or protein annotations. Fixed-size windows along the
    genome sequence are scored by an equation accounting for the number of
    matching peptides, the number of missed enzymatic cleavages in each
    peptide, the number of in-frame stop codons within a window, the
    adjacency between peptides, and duplicate peptide matches. Statistical
    significance of matching regions is assessed by comparing their scores
    to scores from windows matching randomly generated mass data. Tests
    with samples from Saccharomyces cerevisiae mitochondria and Escherichia
    coli have demonstrated the ability to produce statistically significant
    identifications, agreeing with two commonly used programs, PEPTIDENT
    and MASCOT, in 86% of samples analyzed. This genome fingerprint
    scanning method has the potential to aid in genome annotation, identify
    proteins for which annotation is incorrect or missing, and handle cases
    where sequencing errors have caused framing mistakes in the databases.
    It might also aid in the identification of proteins in which recoding
    events such as frameshifting or stop-codon read-through have occurred,
    elucidating alternative translation mechanisms. The prototype is
    implemented as a **client/server** pair, allowing the
    distribution, among a set of cluster nodes, of a single or multiple
    genomes for concurrent analysis.

 73/7,DE/35   (Item 3 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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06615143   Genuine Article#: ZE661   Number of References: 49
Title: Cooperation in R&D in the pharmaceutical industry - The
    network as an organizational innovation governing technological
    innovation
Author(s): Staropoli C (REPRINT)
Corporate Source: UNIVERSITE PARIS I PANTHEON SORBONNE,CTR ATOM, 90 RUE
    TOLBIAC/F-75231 PARIS 05//FRANCE/ (REPRINT)
Journal: TECHNOVATION, 1998, V18, N1 (JAN), P13-23
ISSN: 0166-4972   Publication date: 19980100
Publisher: ELSEVIER SCI LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON,
    OXFORD, OXON, ENGLAND OX5 1GB
Language: English   Document Type: ARTICLE
Abstract: This paper aims at understanding the historical emergence of the
    network organizational form of partners in the pharmaceutical industry
    following the development of biotechnologies. Unlike the situation in
    other high-tech industries, the network, as a governance structure for
    cooperative relationships, is still marginal in this industry compared
    to complex but 'classical' forms of cooperation (R&D agreements,

cross-licensing, joint ventures, mergers/acquisitions). Only two
pharmaceutical companies have adopted such an organizational form to
govern their cooperation in R&D. Referring to other industries, the
network could be considered as an efficient alternative in the context
of high technological uncertainties associated with biotechnologies and
of industrial restructuring leading to the globalization of innovative
practices and processes.

After an Introduction, in Section 2 we discuss the link between
technological innovation and organizational innovation to highlight the
emergence of a multiplicity of institutional arrangements governing
cooperation in R&D. Among all these hybrid forms, the network raises
organizational issues since it short-circuits traditional strategic
operations in the pharmaceutical industry. In Section 3 we define what
we call a 'tight' network, referring to this particular institutional
arrangement. In Section 4 we consider the empirical case of **Rh**
(o) over cap ne-Poulenc Rorer, and **identify** the main reasons
which have influenced the creation of a network of partners focusing on
gene therapy, **Rh** (o) over cap ne-Poulenc Rorer-Gencell. (C) 1998
Elsevier Science Ltd. All rights reserved.

73/7,DE/36   (Item 4 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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05299720   Genuine Article#: VN827   Number of References: 91
Title: MULTIMEDIA **DATABASES**
Author(s): NARASIMHALU AD
Corporate Source: NATL UNIV SINGAPORE,INST SYST SCI,HENGMUI KENG
    TERRACE/SINGAPORE 119597//SINGAPORE/
Journal: MULTIMEDIA SYSTEMS, 1996, V4, N5 (OCT), P226-249
ISSN: 0942-4962
Language: ENGLISH   Document Type: ARTICLE
Abstract: The rapidly growing interest in building multimedia tools and
    applications has created a need for the development of multimedia
    database management systems (MMDBMSs) as a tool for
    efficient organization, storage and retrieval of multimedia objects. We
    begin with a word about traditional **database management**
    systems (DBMSs). Then we present an overview of the MMDBMS research
    issues, challenges, methods, models, and architectures. We review the
    state of the art and research contributions from related disciplines.
    Finally, we consider possibilities and probabilities for MMDBMS
    research in the future.
Descriptors--Author Keywords: MULTIMEDIA **DATABASE MANAGEMENT**
    SYSTEMS (MMDBMSS) ; **DATABASE** MODELS ; **MANAGEMENT** OF
    INTERFACES, OBJECTS, QUERIES, STORAGE, TRANSACTIONS ; MMDBMS
    ARCHITECTURE

73/7,DE/37   (Item 5 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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05186948   Genuine Article#: VF943   Number of References: 17
Title: PHENODB - AN INTEGRATED CLIENT/**SERVER DATABASE** FOR
    LINKAGE AND POPULATION-GENETICS
Author(s): CHEUNG KH; NADKARNI P; SILVERSTEIN S; KIDD JR; PAKSTIS AJ;

MILLER P; KIDD KK
Corporate Source: YALE UNIV,SCH MED,CTR MED INFORMAT/NEW HAVEN//CT/06510;
    YALE UNIV,SCH MED,DEPT ANESTHESIOL/NEW HAVEN//CT/06510; YALE UNIV,SCH
    MED,DEPT GENET/NEW HAVEN//CT/06510; YALE UNIV,SCH MED,DEPT BIOL/NEW
    HAVEN//CT/06510; YALE UNIV,SCH MED,DEPT PSYCHIAT/NEW HAVEN//CT/06510
Journal: COMPUTERS AND BIOMEDICAL RESEARCH, 1996, V29, N4 (AUG), P327-337
ISSN: 0010-4809
Language: ENGLISH   Document Type: ARTICLE

Abstract: In this paper we describe PhenoDB, an Internet-accessible client/
    server database application for population and linkage
    genetics. PhenoDB stores genetic marker data on pedigrees and
    populations. A database for population and linkage genetics requires
    two core functions: data management tasks, such as interactive
    validation during data entry and editing, and data analysis tasks, such
    as generating summary population statistics and performing linkage
    analyses. In PhenoDB we attempt to make these tasks as easy as
    possible. The client/server architecture allows efficient management
    and manipulation of large datasets via an easy-to-use graphical
    interface. PhenoDB data (73 populations, 34 pedigrees, approximately
    4200 individuals, and close to 80,000 typings) are stored in a generic
    format that can be readily exported to (or imported from) the file
    formats required by various existing analysis programs such as LIPED
    and Lathrop and Lalouel's Multipoint Linkage. PhenoDB allows
    performance of complex ad-hoc queries and can generate reports for use
    in project management. Finally, PhenoDB can produce statistical
    summaries such as allele frequencies, phenotype frequencies, and
    Chi-square tests of Hardy-Weinberg ratios of population/pedigree data.
    (C) 1996 Academic Press, Inc.

 73/7,DE/38   (Item 6 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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05130345   Genuine Article#: VB993   Number of References: 14
Title: DNA WORKBENCH - A **DATABASE** PACKAGE TO **MANAGE** REGIONAL
    PHYSICAL MAPPING
Author(s): NADKARNI P; CHEUNG KH; CASTIGLIONE C; MILLER P; KIDD K
Corporate Source: YALE UNIV,SCH MED,CTR MED INFORMAT/NEW HAVEN//CT/06510;
    YALE UNIV,SCH MED,DEPT ANESTHESIOL/NEW HAVEN//CT/06510; YALE UNIV,SCH
    MED,DEPT GENET/NEW HAVEN//CT/06510; YALE UNIV,SCH MED,DEPT PSYCHIAT/NEW
    HAVEN//CT/06510; YALE UNIV,SCH MED,DEPT BIOL/NEW HAVEN//CT/06510
Journal: JOURNAL OF COMPUTATIONAL BIOLOGY, 1996, V3, N2 (SUM), P319-329
ISSN: 1066-5277
Language: ENGLISH   Document Type: ARTICLE

Abstract: DNA Workbench (DW) is a client-**server database** to
    manage physical **mapping** data that will form the basis for
    sequencing and efforts in biologically interesting regions of a
    chromosome, DW draws maps at different levels of resolution in either
    of two modes: proportional, when the sizes of objects and the physical
    distances between them are known accurately or approximately, and
    nonproportional, when most physical distance information in a region is
    not available, but order information is, DW interacts with the user
    primarily through the map graphic, Selection of individual objects on
    the graphic lets the user inspect and modify the underlying data, DW
    also manages dependency tracking between map objects and has a
    rudimentary form of version control, It is currently used to manage
    information on the DRD2 region on chromosome 11, and on the HOX region

of chromosome 17.
Descriptors--Author Keywords: CLIENT-**SERVER** ; RELATIONAL
   DATABASES ; GENOMIC **MAPPING**

 73/7,DE/39   (Item 1 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
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01247500 I98101461300
File allocation designs for distributed multimedia information
networks
Nakaniwa, A; Ebara, H; Okada, H
Faculty of English, Kansai University, Osaka, Japan
IEICE Transactions on Communications, vE81-B, n8, pp1647-1655, 1998
Document type: journal article Language: English
Record type: Abstract
ISSN: 0916-8516

ABSTRACT:
In this paper, we study the optimal allocation of multimedia files in
distributed network systems. In these systems, the files are shared by
users connected with different servers geographically separated, and each
file must be stored in at least one of servers. Users can access any files
stored in any server connected with high-speed communication networks.
Copies of the files accessed frequently are to be stored in several
servers that have **databases**. Therefore, one of the most
important problems is how to assign the files to servers in view of costs
and delays. Considering these problems in heterogeneous network
environments, we present a new system model that covers a wide range of
multimedia network applications like VOD, CALS, and so on. In these
systems, it is obvious that there is trade-off relationship between costs
and delays. Our objective is to find the optimal file allocation such that
the total cost is minimized subject to the total delay. We introduce a 0-1
integer programming formulation for the optimization problem, and find the
optimal file allocation by solving these formulae.

DESCRIPTORS: DISTRIBUTED **DATABASES; FILE MANAGEMENT;**
INFORMATION NETWORKS; INTEGER OPTIMIZATION; MINIMISATION; COSTING; DELAY--
RETARDATION; MULTIMEDIA COMMUNICATION; TELECOMMUNICATION COMPUTING

 73/7,DE/40   (Item 2 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
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01059633 E96120444367
Internet mit Windows NT. Internet-Information-Server
Kuppinger, M
NT und BackOffice Magazin, v47, nSonderheft 32-Bit-Desktop, pp57-59, 1997
Document type: journal article Language: German
Record type: Abstract
ISSN: 0948-678X

ABSTRACT:
Der Internet-Information-Server (IIS) von Microsoft vereinigt als
integrierter Bestandteil von Windows NT 4.0 die Funktionen eines WWW-,
Gopher- und FTP-Servers fuer die Veroeffentlichung von HTML-Dokumenten, den

Dateizugriff und den Dateitransfer. Die SSL (Secure Sockets Library)
erlaubt den Aufbau sicherer **Client-Server**-Verbindungen durch
Datenverschluesselung. Der Internet **Database** Connector (**IDC**)
ermoeglicht den Zugriff auf Datenbanken von HTML-Dokumenten aus. Mit dem
Internet-Dienstmanager, einem grafischen Verwaltungsprogramm, koennen auch
entfernte Server administriert werden. Fuer jeden einzelnen Dienst koennen
separat Zugriffsrechte definiert werden. Auf dem IIS koennen – zum Beispiel
zur Vereinfachung der Domaenenverwaltung – mehrere virtuelle Server auf
einem System definiert werden. Mit virtuellen Verzeichnissen koennen
unterschiedlich verteilte HTML-Dokumente in einer einheitlichen Struktur
bereitgehalten werden. IIS 2.0 enthaelt gegenueber der ersten Version
folgende Erweiterungen: Unterstuetzung von Host-Headern, die den Hostnamen
physischer Server zum Browser zurueckliefern, HTTP Byte-Bereich zum
Kopieren von Dateiteilen, erweiterte Log-Funktionen zur Protokollierung
erfolgreicher Transaktionen und von Fehlern, Uebersetzung von SQL-Daten in
HTML-Format, Zugriff auf Server-Variablen zur Ausgabensteuerung,
Administrationsprogramm, grafisches Programm zur Datenverschluesselung.

DESCRIPTORS: **CLIENT SERVER** SYSTEMS; OPERATING SYSTEM--COMPUTERS
; ACCESS; CIPHERING--ENCRYPTION; DATA TRANSMISSION; DATA CONVERSION PROGRAM
; DATA BANK; DATA NETWORK ADMINISTRATION; VIRTUAL MACHINES; FILE MANAGEMENT
; COMPUTER NETWORKS; INTERCONTINENTAL NETWORKS; DOCUMENT; ACCESS CONTROL;
DISTRIBUTED COMPUTING

 73/7,DE/41   (Item 3 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
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00644161 E93024088022
Supporting physical independence in an object **database server**
(Physikalische Datenabhaengigkeit in Objektdatenbanken)
Aloia, N; Barneva, S; Rabitti, F
IEI-CNR Pisa, I; CNUCE-CNR, Pisa, I
ECOOP '92, European Conference on Object-Oriented Programming, Utrecht, NL,
June 29 – July 3, 19921992
Document type: Conference paper Language: English
Record type: Abstract
ISBN: 3-540-55668-0; 0-387-55668-0

ABSTRACT:
An approach for supporting physical independence in Object **Database
Servers** is proposed in this paper. While in current implementations
the strategy for storing data objects reflects the logical object
definitions, a certain degree of independence in the physical database
organization would be essential to meet specific performance requirements.
In this paper, a canonical object data model and a storage object data
model are presented. In the first, the objects are organized in classes; in
the second, physical objects with similar structures are grouped in
collections. Mechanisms for mapping data structures and operations from the
logical level to the physical level are discussed, and a comprehensive
example is given.

DESCRIPTORS: DATA BANK; DATA MODELS; DATA FORMAT; CLASS; **DATABASE
MANAGEMENT** SYSTEM
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